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QUARTERLY STATEMENT, JANUARY, 1938

THE PALESTINE EXPLORATION FUND

NOTES AND NEWS

ONE of the surprises of the past season's work in Palestine has been the discovery at Megiddo, where the Oriental Institute of Chicago has been working with scientific thoroughness for the last thirteen years, of an unusually fine buried hoard of royal treasure. It seems to have been hidden under the floor of a palace belonging to the fourteenth century B.C., the troublous times of the Tell el-Amarna Letters. Even more interesting to the archaeologist than the magnificent examples of goldsmith's work is the news that the hoard contained about 250 pieces of carved ivory, some of which bear hieroglyphic inscriptions. This is by far the richest find of the kind yet made in Palestine, and students will look forward eagerly to the publication of the ivories, in order to compare them with the Samaria ivories, and with those from Arslan Tash.

Dr. Nelson Glueck's recent exploration of the Wadi el-Arabah, the great rift running between the south end of the Dead Sea and the head of the Gulf of Akabah, has substantiated in a remarkable way the description of Canaan given in the 8th of Deuteronomy, " A land whose stones are iron, and out of whose hills thou mayest dig copper." About twenty miles to the south of the Dead Sea Dr. Glueck discovered the remains of a hitherto unknown fortress, called Khirbet Hamr Ifdan. Surface pottery gave a date in the Early Iron Age, or the time of the early Hebrew monarchy. From the size and position of the fortress it must have been the seat of a strong garrison, the reason for which was revealed by the discovery that it commanded the roads leading to a number of large mining and smelting sites near by. Pottery evidence showed that the period of the greatest activity of the sites belonged to the time of Solomon. Other sites were found at various points in the Arabah right up to the actual head of the Gulf of Akabah. The existence of this rich mineral field provides an interesting footnote to Biblical history, and explains the long and bitter warfare between Israel and Edom. It was waged for the control of the mines and of the access to the Gulf, from whose port, Ezion-geber, the products of the mines could be shipped.

Much interest has been aroused by Mr. Starkey's latest discovery at Lachish, namely, a vast rectangular pit, 100 ft. by 70, cut through the solid rock underneath the city, and possibly intended for a water reservoir. Mr. Starkey dates it early in the 2nd millennium B.C. There is evidently much of interest yet to be discovered in this important site, and it is greatly to be hoped that the excavation, under its present able direction, may go on to completion, with its complement of full publication.

The controversy aroused by the late Mme. Marquet-Krause's excavation of the site of Ai still continues. So sound and conservative a scholar as Professor Lods, whose book *Israel* is well known to students of the Old Testament, examines the evidence carefully in his article *Les fouilles d'Ai et l'époque de l'entrée des Israelites en Palestine*, in Vol. II of *Mélanges Franz Cumont*. His conclusion is that the evidence incontestably points to the fact that Ai was in ruins between 2000 and 1200 B.C., and that the Hebrew name *ha-ai*, "the ruin," suggests that it was a ruin when the Hebrews occupied that part of Palestine. He points out that in the older account of the settlement, contained in the 1st of Judges, the region in which Ai was situated was occupied by "the house of Joseph," that is, by the tribes of Ephraim, Manasseh and Benjamin; but there is no mention of the capture of Ai: we are told, however, that the neighbouring city of Bethel fell into the hands of the Hebrews through a traitor within the walls. Referring to Professor Albright's recent soundings at Bethel, Professor Lods goes on to say: "He (Professor Albright) now dates this event (the capture of Bethel) between 1300 and 1250. But arguing from the acute observation that two important cities so close to one another as Bethel and Ai could not have flourished at the same time, he concludes that the two remains must be identical, a conclusion which may be accepted if we understand by that that Bethel only began to flourish from the time that the royal city of Ai was destroyed by the catastrophe which overwhelmed it about 2000 B.C.: Bethel was the heir of Ai, a 'new Ai.' Hence it may be supposed that the Israelites had some knowledge of the close connection between the two cities, and that from an early date the Hebrew historians had located on the desolate site of 'the ruin' a feat of arms which actually referred to Bethel. The account of the capture of Bethel in J (Judges i, 22–26) and the story of the conquest of Ai in the other sources (Joshua, 7–8) would then be two variants of the same traditions." Professor Lods' article may be recommended to those who are interested in the question.

The importance of M. André Parrot's discoveries at Mari is becoming apparent. The translation of the large find of tablets has begun, and has already yielded results of first-rate significance for the history of the obscure period at the beginning of the 2nd millennium B.C. Much new light has been thrown on the political situation during the first thirty-three years of the reign of Hammurabi. An interesting reference to Ras Shamra is contained in a letter to Zimri-Lim, king of Mari, from Hammurabi: "To Zimri-Lim say, 'Thus saith Hammurabi, thy brother, "The prince of Ugarit hath written me as follows, 'Shew me the house of Zimri-Lim (for) I would see it.'" Now, behold, I am sending thee the prince his son." We also have one of the earliest references to the Habiru. Professor Albright's remarks on the importance of the new documents are worth quoting: "In conclusion we shall recapitulate some of the points which bid fair to make the archives of Mari particularly important for the student of biblical history. First comes their value for the reconstruction of general history in the Patriarchal Age. All future attempts to fit the events recounted in Gen. xiv into Western Asiatic history will be profoundly affected by them. The writer may say at once that this discovery has checked his recent inclination to date the historical background of this chapter before the twentieth century, and has restored his confidence in a dating between 1900 and 1700 B.C."

Some important data relating to the elaborate engineering scheme by which the city of Megiddo was supplied with water, have been discovered recently by the Oriental Institute of Chicago's expedition. They will provide an interesting basis of comparison for the bearing of the great reservoir, if it should prove to be such, discovered last year by Mr. Starkey at Lachish. A valuable article by M. Barrois appears in *Syria*, XVIII, 3, entitled *Les Installations hydrauliques de Megiddo*.

A further instalment of the Aleyan-Baal group of poems, with the title " The Goddes Anat," appears in the same issue of *Syria*.

THE ANNUAL GENERAL MEETING OF THE BRITISH SCHOOL OF ARCHAEOLOGY IN JERUSALEM took place on Thursday, 28th October, 1937. A full report appears on page 18.

POSTPONED. Lack of space in this number compels us to hold over for the April issue an interesting paper by Col. N. Clarke on *Helena's Pyramids*.

FORTHCOMING P.E.F. LECTURES

Wednesday, 26th January, at 4.30 p.m. ARCHAEOLOGICAL METHODS IN PALESTINE. By MISS KATHLEEN KENYON, M.A., F.S.A.

Wednesday, 23rd February, at 4.30 p.m. THE GREAT EPOCHS IN BIBLICAL HISTORY. By PROFESSOR STANLEY A. COOK, Litt.D.

Wednesday, 30th March, at 4.30 p.m. PHOENICIAN AND SYRIAN IVORY CARVING. By R. D. BARNETT, M.A.

These lectures are held at 2 Hinde Street, Manchester Square, W.1, and admission is free to members and interested friends.

Churches at Bosra and Samaria-Sebaste. By J. W. Crowfoot, being *Supplementary Paper No.* 4 of the British School of Archaeology in Jerusalem, has been recently published at 5*s*. (see Review in *Quarterly*, July, 1937). The price of this work to annual subscribers of £1 1*s*. to either the P.E.F. or the B.S.A.J. is 2*s*. 6*d*. Orders should be sent to the Secretary, British School of Archaeology in Jerusalem, 2 Hinde Street, Manchester Square, London, W.1.

BRITISH SCHOOL OF ARCHAEOLOGY IN JERUSALEM

REPORT FOR THE SEASON, 1936–7

The Council has received from the new Director, Mr. P. L. O. Guy, the report which follows, and appeals confidently to the subscribers for the continuance of their support. As no excavation this year required his personal superintendence, the Director has been able to devote much of his time to the school's equipment, and to the organization of the Archaeological Survey of Palestine.

Director's Report, 1936–7

At the request of the Honorary Secretary I remained in London for the Annual General Meeting held on 24th November, 1936, leaving England shortly afterwards and reaching Jerusalem on 16th December. Financial arrangements for beginning the field work of the Archaeological Survey were not then complete, and I was able to devote time to the School's possessions.

The collection of missing periodicals has progressed, but it has been slowing down, for most of the readily obtainable parts have now been obtained, and most of those which are still lacking are rarer, and hard to come by. Lists of the journals which the school desired to acquire, and of those which it had for disposal, were made and sent to the libraries of the Department of Antiquities, the Hebrew University, the American School of Oriental Research, the Ecole Biblique and the Pontifical Biblical Institute. As a result, four bound volumes and a number of odd parts of the *Bulletin of the Metropolitan Museum of Art* which belonged to the school were found among the duplicates of the departmental library, and have been returned to us, and the Ecole Biblique have most generously supplied several of the rare early numbers of their *Revue*, which we lacked, in exchange for certain periodicals which we had for disposal but which were of much less value. Exchanges are being arranged with the Hebrew University Library.

Binding has been continued, volumes of periodicals being bound as they were completed, and other necessary work done. During the financial year ending 30th September, the number of volumes dealt with was as follows :

Newly bound	*Binding corrected*	*Title corrected or amplified*	*Repaired or rebound*	*Total*
185	9	28	12	234

Hitherto, periodicals have been entered on cards in the general catalogue of books. A separate catalogue has now been made in a loose-leaf binder, and is up-to-date. A short summary of this catalogue has been made out and sent to each of the libraries mentioned above, in order that students at those libraries may know what periodicals are to be found in the School library. Lists of the periodicals taken by those libraries have been asked for in exchange, and two have been received.

A draft letter was prepared and forwarded to the Honorary Secretary regarding the arrangement of reciprocal privileges between the school's library and other libraries in Jerusalem for which provision is not made in the Statutes.

Some work has been done on the collection of pamphlets and offprints, which are in process of being arranged in cases, for each of which a list of contents is being made out. I have placed in the school library a number of pamphlets which, I think, will be of more general use there than in my personal library.

The additions to the library during the last eighteen months, which have been considerable, thanks to the Honorary Treasurer's gift, recorded in last year's report, have strained the shelf capacity. Since the table is a large one, I have bought a new bookcase of the same length, which now stands upon it and has been filled with dictionaries and other reference books, thus making a little more room on the wall shelves. Nevertheless, the question of accommodating further acquisitions is one which deserves consideration. A visitor's book and a new loan book have been placed in the library. The maps belonging to the school have been put together, and portfolios to hold them are on order.

The school linen, blankets and mosquito nets have been washed, mended, and marked with the school's initials. After discarding some which were beyond repair, or using them to repair others, 113 pieces are now in good condition.

The school's publications have been placed on sale at the Divan Bookshop, Jaffa Road, Jerusalem, and a notice to inform the public of this fact has been inserted in the local press.

The Colt Expedition has excavated again in the Negeb. The council will hear from the excavators themselves an account of their work. I should, however, like to compliment the expedition on the persistence with which it endeavoured to reach the bottom of the great well at Abda, and to commiserate with it on its failure to do so. I have spoken about this well to the Development Officer now in charge of waterworks in the Negeb, and am not without hope that it may be possible to have its clearance completed before next season.

Mr. Baly delivered an interesting broadcast from Jerusalem on the work of the expedition.

Students.—I discussed with Mr. G. E. Kirk, student of the school, the question of his doing survey work in the Negeb when he was not engaged on work for Mr. Colt. This has been arranged.

It had been hoped that it would be possible this year for Miss Joan Crowfoot (now Mrs. Payne) to work the flint site at Ma'alaga mentioned in my last report, but after carefully going into the question of security, I came, with regret, to the conclusion that it would be unwise for her to do so.

During the early summer, Mr. R. C. Smail, Sidney Sussex College, Cambridge, was in Palestine in connection with his university work on Crusader material. He was commended to me by Mr. Johns, and I spoke with him of the possibility of undertaking the proposed Crusader monograph for the survey when his present work had been completed. He expressed his willingness to do so, and has been granted a Mond Studentship.

Mr. J. D. Waechter, who has worked on several expeditions outside Palestine, asked me to obtain for him from the

Transjordan Government a permit to excavate, under the auspices of the school, a flint site in the Wadi Dhobai, about forty kilometres E.S.E. of Amman. This I have done, and Mr. Waechter expects to begin work towards the end of November. One of the conditions is that the results of the excavation should be dealt with in collaboration with Miss Garrod.

Miss Joan Crowfoot and Mr. Charles Inge were again of Mr. Starkey's staff at Tell Duweir last season.

The Archaeological Survey.—Though field work could not be begun early in the year, it was possible to continue with preliminaries. It will be recalled that the Palestine Government had kindly offered to provide quarters, but that those available were not very suitable. Since an office of some sort was necessary, I hired one room from the Dominicans, paying the rent provisionally out of school funds, and subsequently obtaining a refund of this from government. I also purchased, out of school funds, a steel cupboard and filing cabinet, which have been lent to the survey, and I obtained maps from the Government Survey Department, who have been good enough to supply them free of charge.

Since some publicity for the survey seemed to be desirable in Palestine as well as in England, I lectured on it before the Palestine Oriental Society and at the Annual General Meeting of the Palestine Association of University Women, as well as at the Police Barracks on Mount Scopus. Following on the last lecture, a paragraph was inserted in Police Orders to the effect that every assistance was to be given to survey workers. I also delivered a broadcast through the Palestine Broadcasting Service, and arranged for some mention of the survey to be made in the local press.

Pending the arrival of funds, I went over Sheet 7, checking the lists of known antiquity sites by squares, and marking the sites, as far as possible, on working copies of large-scale maps, in order that these might be ready when funds arrived. Funds were made available in Jerusalem towards the end of June, but during July and part of August I was fully occupied with the Palestine Matriculation Examinations, and began field-work towards the end of the latter month. I had hoped to be able to obtain temporary local assistance in this, but there are practically no archaeologists in Palestine at that time of year, and the only one who might have accompanied me was fully occupied with publication for his own institution, and so far I have done without help.

The authorities both in the Jerusalem and Jaffa districts recommended me to refrain from visiting the country covered by the eastern part of the sheet, and I have therefore been working in the west, beginning with the N.W. corner. Here the appearance of the countryside has greatly altered, since I first knew it in 1922, owing to development both urban and rural, but chiefly through the extension of the area under citrus cultivation.

The major sites in the area N.E. of Tel Aviv are known, and are marked on the old map, and I have found and visited these, as well as several minor *khirbets* in the more open country, without much difficulty. But the discovery of sites so far unknown, which may be situated in the citrus belt, is by no means easy, for orange trees grow densely and to some height, and all groves are, of necessity, strongly fenced. It is thus possible for some sites to be missed, but I think it may be said that none of these will be large.

The most interesting small site I have visited is one at the mouth of the Auja or Yarkon. The map reference is 12911679: the *tell* measures some fifty by twenty-five metres, is about nine metres high, and has on it a lighthouse (marked on the map) and a small war memorial. Pottery shows that there was occupation from about the end of the Bronze Age to Roman times.

Just to the north the new Reading power station is being put up, and the *tell*, which comes within the area owned by the Palestine Electric Corporation, is being partly removed. I mentioned this to the department, and since there were difficulties in the way of official supervision an arrangement was come to under which the work of excavating was to be continued by the Corporation if I could arrange for supervision. Fortunately Mr. Waechter was free for a few days, so I took him down for a visit of inspection.

Excavation was in progress, when we arrived, on the eastern part of the mound, and there was visible in the face of the cut what I at first took to be the end of a stone wall. Closer inspection showed, however, that it was not this, but one of the ashlar sections in the face of a wall otherwise composed of rubble, such as have been found at Megiddo and at Tell abu Huwwam. A little digging at the proper interval showed another ashlar section, and the remains of two others have since shown up, there being now visible a fair stretch of what appears to be the outside wall of a house which still remains unexcavated. I should provisionally place it about the fifth or sixth century B.C., for the masonry more closely resembles the late work at Tell abu Huwwam than the earlier work at Megiddo.

Mr. Waechter was good enough to spend a couple of days (at his own expense) observing the work and making a measured section of the fact of the cut. Meanwhile I was able to see Mr. Rutenberg, the managing director of the corporation, who has shown keen interest in the site. He has given instructions to his engineers that any instructions from me are to be closely followed, and has been good enough to say that if anything of particular interest should turn up he will provide funds for its proper preservation.

Since Mr. Waechter is unable to continue to supervise the work, as he is returning to England before starting his own excavation in Transjordan, I have asked the engineer in charge to hold up excavation until I can arrange with Dr. Sukenik, of the Hebrew University, to take charge.

South of Jaffa the citrus belt continues to be dense for some distance, the country becoming more open south of 'Aqir. I have been down to the southern limit of Sheet 7, seeing the general lie of the land, and visiting several sites. Mughar (129138) which is dealt with at some length in the old *Survey Memoirs*, is a site which has Byzantine remains at one end of its ancient occupation, and Early Bronze at the other. Kh. Thalluja is purely Byzantine, and there is an unmarked Byzantine site just off the map, at Km. 37 on the road running S.W. from Qastina to Sawafir. This southern area can be conveniently worked from Giv'at Brener, Hedera and Gan Yavne, at all of which there is accommodation.

Some fifteen years ago I flew along the coast of Palestine and marked on my map a number of things which were visible from the air. I have now visited one of the places then marked, situated at 12411505 on the new map, where there is a spot level of forty-five metres. This turns out to be a large Byzantine town, known locally at Tell Ghuzzeh, which, as the map shows, is now completely covered and surrounded by sand dunes. It is obvious that, when the town was occupied, the dunes cannot have been as they are to-day, and the deductions suggested are that these dunes are of very recent formation, and that they have advanced at least some 5 kms. inland since the site was deserted. It would be rash to insist on precise deductions from the single site of Tell Ghuzzeh. but I believe that it will be possible to find other similar sites among the dunes, and if the lowest dates of several of these can be satisfactorily determined it should be possible to arrive at a fairly positive conclusion, both as to the age of the dunes and their rate of advance. Information of this sort is interesting archaeologically, and could be of use to the Department of Agriculture, which is concerned with measures for arresting the development of dunes. I propose to go carefully over the dune area, and shall try to go just after rain, when one can walk more quickly than when the sand is dry and powdery.

I am bound to refer in this report to the state of public security in Palestine. This has become worse in the last few days, and is definitely bad at the moment. Work in the hilly eastern part of Sheet 7 is quite ruled out for the time being, and even at Lydda, in the centre of the sheet, Government has found it desirable to impose a curfew of twenty-three hours out of the twenty-four. The western part of the sheet is safer, and until things improve I propose to limit my field-work to that part, to which I am returning to-morrow.

P. L. O. Guy,
Director.

Jerusalem,
16*th October*, 1937.

Publications.—Mr. J. W. Crowfoot's Memoir *Churches at Bosra and Samaria-Sebaste* (B.S.A.J. Supplementary Paper 4) has been published, and distributed to subscribers to the school and the Palestine Exploration Fund. It is now on sale to the public at 2 Hinde Street, W.1, price 5*s*.

Discoveries at Auja Hafia. By H. Dunscombe Colt in *Palestine Exploration Quarterly*, October, 1936.

BRITISH SCHOOL OF ARCHAEOLOGY IN JERUSALEM

ANNUAL GENERAL MEETING

THE Seventeenth Annual General Meeting of the British School of Archaeology in Jerusalem was held at the rooms of the British Academy, Burlington Gardens, London, W.1, on Thursday, 28th October, 1937. Sir Frederic Kenyon, G.B.E., K.C.B., President and Chairman of Council, presided over the business meeting of subscribers, and The Rt. Hon. Lord Lloyd of Dolobran, G.C.S.I., G.C.I.E., D.S.O., presided at the open public meeting which followed. At the latter meeting Miss Dorothy Garrod discussed "Recent Palaeolithic finds in Palestine" and Mr. Welbury Kendall, A.R.I.B.A., described the "Architectural Results of the Colt Archaeological Expedition to Esbeita and Auja Kafir."

The Minutes of the Annual Meeting, held on 24th November, 1936, were read and confirmed.

The Report and Accounts for the season 1936–7 were presented and adopted.

The Officers were re-elected as follows: Sir Frederic Kenyon, President and Chairman of the Council; Sir Robert Mond, Honorary Treasurer; and Professor J. L. Myres, Honorary Secretary. The four retiring members of Council were re-elected, namely, Professor S. A. Cook, Sir Arthur Evans, Mr. J. W. Crowfoot, and Mr. G. M. FitzGerald. Colonel S. F. Newcombe and Mr. A. M. Hyamson were unanimously re-appointed as Honorary Auditors, and thanked for their services.

The Open Public Meeting followed, with the Rt. Hon. Lord Lloyd of Dolobran, G.C.S.I., G.C.I.E., in the chair.

Miss Dorothy Garrod gave a *Summary of Seven Seasons' Work at the Wady el-Mughara*, as follows:

The results of our seven seasons' work at the Wady el-Mughara have been published year by year as digging progressed. Now, on the eve of definitive publication (*The Stone Age of Mount Carmel*, Clarendon Press), the time has come to give a general survey of the work, and to outline the conclusions which have resulted from a detailed study of the material. This has led, among other things, to a modification of some of my earlier ideas, and to a partial change of nomenclature, with which I will deal as each point arises.

The caves of the Wady el-Mughara have proved more fruitful than we could possibly have hoped, even in our most optimistic moments, when excavation began. I need not insist on the finds of fossil human material, which are being studied by Sir Arthur Keith and Mr. T. D. McCown. A less spectacular, but no less solid result has been the discovery of a nearly complete succession of archaeological deposits covering the long period of time from the Tayacian to the end of the Natufian ; this establishes on a firm foundation a large part of the Stone Age sequence for this area of the Near East, and it has already been tested by excavations made in other Palestinian caves by M. René Neuville and Dr. Moshe Stekelis, working on behalf of the Institut de Paléontologie Humaine in Paris.

A single diagrammatic section combines the sequence of deposits in the three caves of the Wady el-Mughara. It will be seen that the overlap between the Mugharet el-Wad and the Tabūn enables us to build up this section with as much confidence as though the complete sequence had actually been present in a single cave.

The Tayacian layer (Tabūn G), which lies immediately on the bedrock, is the oldest archaeological level so far found in any Palestinian cave. It exists also at the Mugharet Umm Qatafa, in the Judaean desert, where it was found by Neuville in 1932, a year before we first reached Layer G in the Tabūn. We owe to the Abbé Breuil the identification of this Palestinian industry with the Tayacian of La Micoque. It is characterized by an abundance of small utilized flakes, the majority with plain striking-platforms, and by a great scarcity of true implements with secondary working.

The Upper Acheulean of Layer F is above all an industry of hand-axes, flake-tools being absent at its base, but appearing in relatively small numbers towards the top. This level appears to correspond to the Upper Acheulean Layers E and D2 of Umm Qatafa, where hand-axes predominate.

The succeeding horizon (Tabūn E) I originally labelled Acheuleo-Mousterian, but I have now abandoned this in favour of Upper Acheulean. Thanks to Professor Breuil and

Mr. Harper Kelley I have lately been able to examine a large collection of Acheulean material from the river deposits of Northern France, and I find that the thick racloirs with resolved flaking which are so abundant in Tabūn E do in fact occur as a typical component of the Acheulean culture in Western Europe. The hand-axes of Layer E include a good number of true Micoquian forms, especially at the horizon Ec and this stage can therefore be equated roughly with the top layer of La Micoque itself. During a visit to Les Eyzies two years ago I was able, by courtesy of M. Peyrony, to make a study of the La Micoque material, and I was very much struck with the relatively close correspondence of that site with our lowest layers at the Wady el-Mughara, and with Umm Qatafa.

Layers C and D of the Tabūn I originally classified as Lower Mousterian, and Layer B (including the Chimney deposit) with Wad G as Upper Mousterian. Later Tabūn C and D, with the Skhūl industry, were dubbed Levalloisian, the overlying levels remaining as Upper Mousterian. This was done partly in order to conform with Neuville's nomenclature, but it suggested a more marked difference between the upper and lower levels than in fact existed, and I have now, in consultation with Professor Breuil, adopted the term Levalloiso-Mousterian for the whole cycle, the change from Lower to Upper, which occurs between Tabūn C and B, being marked by the disappearance from the fauna of *Rhinoceros merckii* and hippopotamus. The different stages of the Levalloiso-Mousterian have been found by Neuville in a number of Palestinian sites, but notably in the cave of Jebel Qafseh, near Nazareth, where human skeletons corresponding roughly in age with those of the Mugharet es-Skhūl have been discovered.

The Levalloiso-Mousterian of Palestine has affinities with the Middle Palaeolithic of Egypt, in which the Levallois flake predominates to the exclusion of classic Mousterian forms, and differs from that of Europe, in which industries of Levalloisian tradition alternate with those of true Mousterian type.

With the arrival of the Upper Palaeolithic, contact with Egypt and North Africa apparently ceases, and Palestine is assimilated to Europe. The Lower Aurignacian (Wad F) is better represented in other sites (e.g. Jebel Qafseh) than at the Wady el-Mughara, where it occurred in a layer of erosion which also contained residual material from the Upper Levalloiso-Mousterian. It is an industry more or less in the Châtelperron tradition, but more delicate and less primitive than that of the Châtelperron level of the west, and with certain original features. It is distinguished in particular by the presence of a special type of triangular flint point with thinning at the base, which occurs also, but very occasionally in the Aterian of North Africa. I have named this the Emireh point, from the Galilean cave el-Emireh, excavated by Turville-Petre, in which it was first found *in situ*.

The oldest horizon of the Middle Aurignacian (Wad E) is characterized by the presence of a special type of small spiky flint point with fine retouch which is known also from the European sites of Krems and Font-Yves, both referred by their excavators to a fairly early stage of the Aurignacian. The industry of the following layer (Wad D) with its keeled scrapers and nose-scrapers, is a well-developed classic Middle Aurignacian, though it cannot be referred exactly to any one of the subdivisions of this stage which have been worked out for Western Europe, and which probably have only a local significance. Layers corresponding to Wad E and D were found by Turville-Petre in excavations carried out for our expedition in the Mugharet el-Kebarah near Zichron Jacob, and by Neuville in various sites, of which the most important is Erq el-Ahmar in the Judaean desert.

If we look at a distribution map of the Middle Aurignacian we see it lying as a broad band across Central and Western Europe, the whole southern shore of the Mediterranean being left on one side. In the absence of any evidence for a European origin it seemed probable, even nine years ago, that we should have to look to Asia for its centre of diffusion. The evidence we now possess of the presence in the Near East of a highly developed, unmixed industry of this type throughout the greater part of the Upper Palaeolithic (covering, that is, roughly the period of the Middle and Upper Aurignacian and the Solutrean in the west), brings strong support to this view—in fact promotes it from probability to practical certainty.

The Upper Aurignacian of Wad C which presumably takes the place occupied by the Magdalenian in the western sequence, I originally described as Capsian, but a closer comparison soon showed that this identification was not valid. This very rough and peculiar industry, with its abundant polyhedric burins, cannot be compared exactly with any other Upper Palaeolithic facies yet known. In some ways it has the aspect of a degenerate survival of the Middle Aurignacian, but the reappearance of the Châtelperron point, absent since the base of the Upper Palaeolithic, suggests the arrival of outside influences.

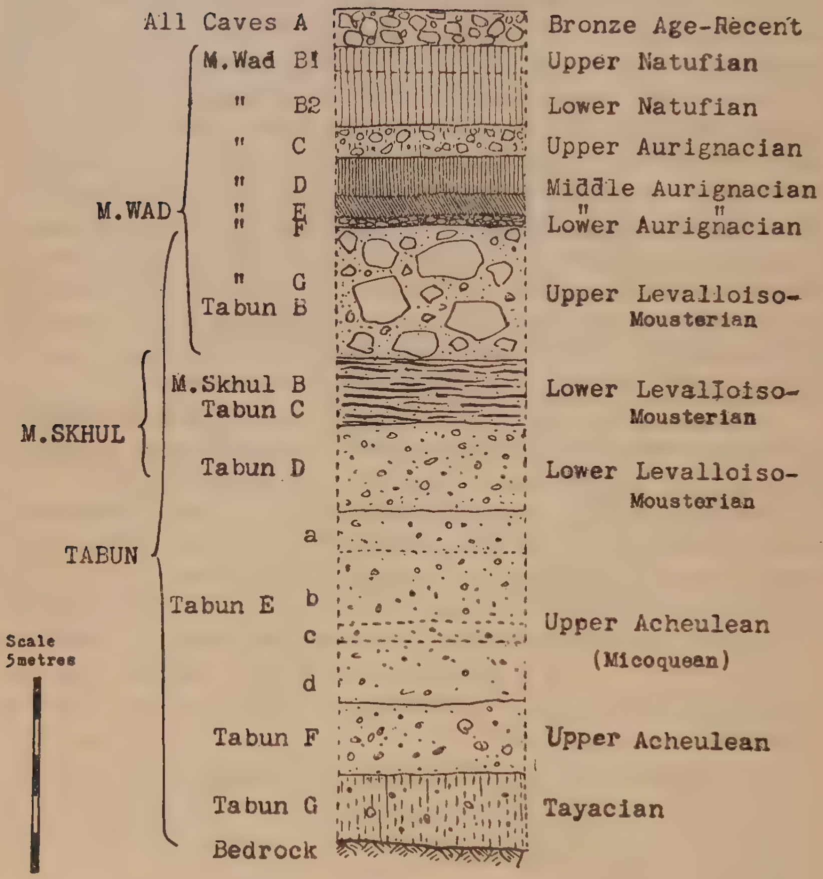
The Natufian (Wad B1 and B2), in spite of certain general features common to the great majority of microlithic industries, is definitely original, as indeed might be expected, since by this time local differentiation all over the world is much more marked than in earlier periods. Natufian art shows no Predynastic affinities, nor, in spite of certain superficial resemblances, can it be linked with that of the Magdalenian, to which it is inferior. In the matter of Natufian origins we have everything to learn, but it is a fairly safe guess that excavation in Anatolia would throw light on this problem.

Neuville has recently attempted a fourfold division of the Natufian, based on his soundings in various sites. According to this scheme, the industry of Wad B2 would correspond with Natufian I, and that of B1 divided between Natufian II and Natufian IV (the letter being characterized by notched arrowheads). In the main Neuville's classification appears to be valid, but it needs to be confirmed, especially as regards the middle stages, by further excavation.

It is not yet possible to establish a clear correlation between the various archaeological layers found in the Wady el-Mughara and elsewhere, and geological deposits outside the caves, but Miss Bate's study of the fauna throws light on climatic conditions. The most recent work on the Jordan Valley is that of Picard, who distinguishes in the Pleistocene two main Pluvials (A and B), separated by an Interpluvial marked by volcanic activity, and followed by a period of increasing desiccation (Jungdiluvium), with a possible slight pluvial episode before the beginning of the Bronze Age. Picard's Jungdiluvium can be identified with fair certainty in the Mugharet el-Wad, where the gradual replacement of deer by gazelle in the Upper Palaeolithic layers suggests increasingly dry conditions from the Lower Aurignacian onward. The evidence of the underlying layers is not so easy to interpret. Tabūn G yielded no animal bones; those from Tabūn F are rather scanty, but suggest sub-tropical conditions. At Umm Qatafa, however, the lower layers, which correspond to Tabūn F, yielded neither rhinoceros nor hippopotamus, and the fauna was a holarctic one which did not suggest particularly damp conditions. Tabūn E on the other hand contained an abundant fauna which included *Rhinoceros merckii* and hippopotamus, and points to a rather warm, wet climate. The same conditions persist throughout Tabūn D and C, but in B rhinoceros and hippopotamus disappear, and two species of deer (*Cervus elaphus* and *Dama Mesopotamica*) are extremely abundant—a fact which suggests continued high precipitation but a lower temperature. We therefore have evidence of fairly dry conditions in the early part of the Upper Acheulean, followed by a long rainy period throughout the Micoquian and the Lower and Upper Levalloiso-Mousterian.

The study of the coastal deposits of Syria and Palestine offers a promising field, since these are now known to contain archaeological horizons. Père Bergy S. J. has already done interesting work in this line in the Beirut region, but we are still too much at the beginning of things for conclusions to be permissible. Still less is it possible at present to attempt correlations with glacial periods in Europe, but I am hopeful that within the next decade prehistoric studies in Palestine, moving step by step with geology, will have made a further advance at least as great as that achieved in the period from 1926 to the present day.

Mr. Welbury Kendall described the architectural results of the Colt Archaeological Expedition to Esbeita and Auja Kafir, a report of which we hope to publish in the April number.


All Caves A
M.Wad B1
" B2
" C
" D
" E
" F
" G
Tabun B
M.WAD
M.Skhul B
Tabun C
M.SKHUL
Tabun D
TABUN
a
Tabun E b
c
d
Tabun F
Tabun G
Bedrock
Scale
5 metres
Bronze Age-Recent
Upper Natufian
Lower Natufian
Upper Aurignacian
Middle Aurignacian
Lower " Aurignacian "
Upper Levalloiso-Mousterian
Lower Levalloiso-Mousterian
Lower Levalloiso-Mousterian
Upper Acheulean (Micoquean)
Upper Acheulean
Tayacian

Composite section of the layers in the three caves of the Wady el-Mughara.

THE FORTY YEARS' WANDERINGS OF THE ISRAELITES

By Major C. S. Jarvis

(Late Governor of Sinai)

(Report of a Lecture delivered to the members of the Palestine Exploration Fund on Wednesday, 27th October, 1937.)

The Chairman (Colonel Sir Charles Close), in introducing the lecturer, reminded members that in February Major Jarvis had given them a most interesting lecture on " The Desert Yesterday and To-day." On this occasion he was lecturing on an equally, if not even more interesting subject, " The Forty Years' Wanderings of the Israelites." There would probably be several points raised during the lecture on which all would not be agreed, and that would tend to promote an interesting discussion.

Major C. S. Jarvis then delivered his lecture as follows :

The subject of my lecture—" The Forty Years' Wanderings of the Israelites "—has frequently been termed the happy hunting ground of the amateur. The attraction being that there is not much documentary evidence which one has to study. I think the books of Exodus and Numbers can be regarded as the only reliable first-hand evidence. Other books in the Bible refer to the Wanderings, but they were written much later in much the same way as Philip Guedalla and Lytton Strachey deal with episodes in our past history, they having first read up the subject on existing material.

The story of the Wanderings of the Israelites though very well written up by the Hebrews is not mentioned at all by the Egyptians. That is somewhat remarkable because, considering all things, Egyptian records are fairly complete. So far as I am aware, they only refer to the Israelites in Egypt as foreign labourers. Their flight from the country is completely ignored.

With regard to my theory of the Forty Years' Wanderings, I think I may lay claim to amateur status. I am neither a historian nor an antiquarian, but I can speak on the subject as one who has lived in Sinai for fourteen years, during which time I wandered all over the country, seeing it in drought years and in wet years. I do not think anyone could get to know Sinai thoroughly, to understand its climate, its possibilities and disadvantages in much less than three years.

A short description of Sinai may help one to understand the very inhospitable country in which the Israelites spent forty years. It is a triangular peninsula 260 miles long, 150 miles wide at the north, and tapering to a point in the south. At the present time it may be geologically divided into three parts: first, a sandy belt of country some fifteen miles deep, stretching from the Mediterranean shore southwards; second, a high gravel and limestone plateau, intersected by wide wadis or dry torrent beds, which extends from the sandy belt to a point some 150 miles southward; and, thirdly, a tumbled mass of granite mountains rising to 8,000 feet which forms the apex of the Peninsula. The coastal sandy belt dies away a few miles east of El Arish, giving place to a light loam that yields excellent crops of barley, wheat and millet. There is every reason to believe from the encroachment of sand that has taken place during the last twenty years that a great part of this belt is of recent origin, and that at the time of the exodus all the coastal area was capable of producing corn crops.

A point to bear in mind before we discuss what happened to the Israelites is that the Survey of Egypt, both geologists and surveyors, are of the opinion that the climate of Sinai has not altered to any great extent during the last 5,000 years. They admit that the rainfall might have been slightly heavier but not more than an inch or two in comparison with the present rainfall. They are also very definitely of opinion that there has been no volcanic activity in Sinai during the last million years; possibly several million years have passed since there were active volcanoes in Southern Sinai.

Some of you may possibly have seen recent correspondence in the *Sunday Times* between Professor MacBride and Mr. Beadnell of the Survey of Egypt, with myself intervening, with regard to volcanic activity in the south of the peninsula. If there were active volcanoes in the south of Sinai during the period of the Wanderings, then it would be easy to explain away the fiery manifestations which occurred during the Wanderings. Unfortunately, about twenty expert surveyors are unanimously of the opinion that there was no volcanic activity there at that time.

I think Professor MacBride bases his evidence on a remark made by Lord Allenby during the War. All I can say is that I was with Lord Allenby during the war and he was much too busy with the Turks to go climbing mountains in Sinai in search of extinct volcanoes. He was in front of Gaza all the time and, to the best of my belief, he only once motored down as far as Magdaba, which is some twenty miles south of El Arish.

When Moses left Egypt he must have had an objective. He was a great leader of men. He knew Sinai perfectly well. He had been wandering there as a shepherd for several years. He had married a Sinai woman, the daughter of Jethro, the paramount sheikh. My contention is that Moses went straight towards Palestine. From Kadesh Barnea, which I think is the present Ain Gedeirat, he sent out his scouts who got as far as Hebron and then reported they had come up against the Sons of Anak, redoubtable and gigantic men. Apparently, Moses decided that Palestine was too hard a nut to crack and settled down with his people in the Kadesh Barnea area where they remained for forty years, until they marched down south to Akaba and into Jerusalem by way of TransJordan. They probably stopped in that part of Palestine, because the triangle El Arish-Rafa-Kossiema was and still is the one area of Sinai where it is possible to grow corn, olives and other crops. A study of the books of Exodus and Numbers discloses the fact that during the whole of the Wanderings the Israelites had flour, bread, meat, oil and other commodities, and that they were accompanied by a very large number of animals. The animals also had to be fed. The Israelites during their forty years' sojourn must have lived much the same sort of life as the inhabitants of Sinai live to-day, taking full advantage of those areas where the soil is suitable for corn crops, exploiting the date palm, and using the mountainous area as grazing lands for their sheep and goats.

There is a theory that Moses saw that the Israelites were weak and had somewhat degenerate as a result of living so long in Egypt and that he decided to harden them by marching them round Sinai for forty years so that they would become fit to tackle Palestine. We are in these days accustomed to dictators with five-year plans, but dictators with forty-year plans are less likely, for the simple reason that they are usually somewhat conceited men and desire to obtain full credit for their work. If a plan is likely to take forty years to materialize it is unlikely the dictator could see it through.

The generally accepted idea of the wanderings is that the Israelites prior to their flight were settled in the Zagazig-Wadi Tumilat area west of Ismailieh; and Succoth, from whence they started the Exodus, has been, I understand, definitely located at Tel el Mashkuta, twenty miles west of Ismailieh. The theory is that the Israelites came round north of the Bitter Lakes. In those days the sea probably extended as far as the lakes. It is supposed that the disaster to the Egyptian host occurred near Suez. The Israelites afterwards went wandering around and up to Mount Moses where they received the law, and for the next forty years they continued to wander, living on quails and manna, the latter being the deposit left by a small insect that feeds on the tamarisk there at certain seasons of the year. Imagine eating nothing but quails and manna for forty years!

In addition to the very large number of animals that accompanied the Israelites they also had covered waggons. Covered waggons could not possibly have trekked through the granite mountains. It is not possible to get a modern Ford through without having the car pushed from the back; a covered waggon is out of the question. The deep gorges have loose gravel at the bottom and very difficult and precipitous passes have to be negotiated, so that waggons could not have gone very far.

Before one accepts a new theory it is necessary to examine the discarded one and the evidence in its favour. As far as I can see, the only evidence in favour of Southern Sinai is tradition, and tradition is very unreliable even after a few years. You must remember that the pilgrims of old did not set out to look for the Holy Mountain till after the death of Christ, which was at least 1,500 years after the days of Moses.

After 1,500 years evidence was probably very unreliable. The old theory has probably been accepted because students of the Wanderings have gone out without having time to see the whole of Sinai. They have had to be conducted round by a guide and shown the various accepted spots, Marah, Kibroth-Hattaavah, and so on. They have, as I say, accepted such sites without seeing the whole of Sinai.

Against my theory that the Israelites settled in the triangle El Arish-Rafa-Kossiema it might be argued that the area is not large enough to accommodate the host. As you know, Moses numbered the host and the fighting men came to over 603,550.

Allowing to every fighting man a wife, two children, and an aged parent, which is a very modest estimate for an Oriental race, one arrives at the stupendous figure of three million. The absolute impossibility of moving a host of this dimension out of Egypt and supporting them in the desert has long been apparent to all students of the Wanderings, and Sir Flinders Petrie has a most feasible and ingenious explanation of how the misconception occurred. The Hebrew word for thousand—*alaf*—may also mean family or section, and is somewhat similar in its meaning to the Arab word—*aila*—which is used in the same sense. In Num. i, verse 21, we read :

" Those that were numbered of them, even of the tribe of Reuben, were forty-six thousand and five hundred,"

and so on. But with *thousand* translated as *family* we get :

" Tribe of Reuben, 46 families 500 fighting men—not 46,500."

" Tribe of Simeon, 59 families 300 fighting men."

" Tribe of Gad, 45 families 650 fighting men," &c.

It will be seen that in most cases a large number of families means a proportionately large number of fighting men—namely, Judah seventy-four families 600 men and Dan sixty-two families 700 men. There are some exceptions to the rule, but on the whole the theory holds good. If one allows four dependants to each fighting man, one arrives at the moderate figure of 27,000, which is a host that could be transported without great difficulty and which could quite easily support itself in the cultivable part of North Sinai, it being, in fact, the approximate number of inhabitants in that area to-day. The argument that the numbers must have been nearer 30,000 than 3,000,000 is proved by the fact that Moses acted as judge and mediator in every dispute, and that there were only two midwives to the whole host.

Another point against Southern Sinai being the site of the Wanderings is the manna, which was undoubtedly plentiful. In certain seasons of the year manna is to be found lying fairly thickly under the tamarisk bushes. It is not exactly an appetizing form of diet, but would no doubt serve to keep body and soul together. In Southern Sinai there are very few tamarisks to be found, but on the Mediterranean coast they are plentiful, and before the sand dunes invaded this area it is obvious from the stumps of semi-fossilized trees found in the sand that there must have been a veritable forestal belt of tamarisk, which would have supplied manna for the Israelites. At the same time, I do not feel very sure about this point, as the deposit I am talking about does not fit in to my mind with the manna as described in Exodus, and also from time to time one reads in the newspapers of falls of real manna in different parts of Africa. Whether these reports can be believed or not I cannot say—I certainly have never seen a fall of manna in Sinai.

I do know that in the south there are only a few tamarisks growing in the various mountain gorges; certainly not enough to supply a host with manna.

The strongest argument of all is concerned with the quails. This is, in fact, so convincing that to my mind it definitely settles the matter.

On two separate occasions—once after leaving Elim and once, considerably later, at Kibroth-Hattaavah—the Israelites fed on quail that came in from the sea in a cloud and settled near the camp. This is a sight that may be seen on almost any part of the Mediterranean coast during the autumn migration. In the months of September and October, shortly after dawn on almost every morning, one may see a cloud of quail coming in from the sea so completely exhausted that they pitch on the seashore and stagger into the nearest scrub bush for cover. It is possible when the birds are in this condition to catch some of them by hand, and in a year when the migration is good it would be quite possible for a host as numerous as the Israelites to eat their fill; and, what is more, the birds being very fat and oily, it would not be surprising for a surfeit to cause gastric trouble, which apparently happened at Kibroth-Hataavah. All this could quite easily happen in North Sinai, but it could never have happened in South Sinai, for the simple reason that the quail pitch on the Mediterranean shore and nowhere else in Sinai. In the fourteen years I spent in Sinai I occasionally saw an odd sick bird or two in South and Central Sinai which had fallen out of the migrating mass flying overhead. One year over 1,000,000 quail were exported from Egypt for people in Europe to eat, and the greater part of them came from the North Sinai coast, not from the south. Migrations of birds never change. There are records of birds regularly visiting certain places in other deserts where 500 years ago there was water, but where there is none now. Moreover, the coast is the natural place on which birds would land after a long flight. The quail have already flown 1,200 miles across the Mediterranean; they are very tired and obviously pitch within a few yards of the sea to rest. There is not the slightest reason to justify them flying on another 200 miles to land in the south just to oblige the Israelites! The other things can be altered to suit your theories, but it is not possible to explain away the quail migration.

It should be borne in mind that Gebel Musa or Mount Moses is not by any means the original selection, as at different times between the first and fourth centuries other peaks such as Gebel Serbal, Gebel Caterina, and Gebel Um Shomer have been accepted as the Mountain of the Law. There is the monastery of St. Caterina at the foot of Mount Moses. The church inside was built in A.D. 342 by Queen Helena, the walls round the monastery having been built by Justinian in A.D. 530. I believe it is the oldest building in the world that has been continuously occupied. Naturally, the monks there do not approve of my theory!

Mount Moses is 8,000 feet high and is really most impressive. The small scrub that grows in the crevices of the rock has a smell like incense and certainly one does get the feeling that something epoch-making must have occurred in that part of the world. It is definitely a place that pilgrims would accept for the coming of the Lord or any episode of a similar magnitude.

Gebel Serbal, about twenty miles distant from Mount Moses, was accepted by pilgrims and early Christians as being the Holy Mountain and remained so for 300 years until finally they changed over to Gebel Musa. That is proof that they were not very certain as to which mountain it was on which Moses received the Law.

If we accept the north as the place of the Wanderings we must find a mountain there suitable as the site of the Law-giving. There is nothing as high as 8,000 feet, but it must be remembered that a single mountain rising 2,000 feet from a flat plain is as impressive as one running up to 8,000 feet in a mountain range. A mountain in the north that would just fit in is the Gebel Hellal, about thirty miles south of El Arish.

The name Gebel Hellal is of peculiar significance, the Arabic word *Hellal*, meaning that which is permissible. The word is generally used in connection with the slaughtering of animals. If an animal is correctly killed by having its throat cut it is deemed *hellal*, or slaughtered according to the religious law and therefore fit to eat. I have taken particular trouble to ascertain from the local Arabs that the name is definitely Hellal and not Hilal which means "crescent". That rather helps my theory that it might be the Holy Mountain, though I do not give it as my considered opinion. I simply say it might be.

Now we come to the question of the Red Sea crossing and the loss of the Egyptian Host. This is always supposed to have taken place in the Gulf of Suez portion of the Red Sea because in Exodus frequent references are made to the Red Sea ; but the correct translation of the Hebrew words *Yam Suf* is not Red Sea but Reed Sea or Sea or Reeds, or Sea of Weeds. There is no reason whatever to suppose that the Gulf of Suez or the Red Sea contained reeds or weeds. Certainly the Gulf of Suez part of the Red Sea is freer from sea-weed or any marine growth than any sea in the world. The only place that in any way suggests a sea of reeds is the vast Bardawil Lake on the Mediterranean coast between Port Said and El Arish. On certain parts of the shores of this lake there are big areas of rushes, and, if we can accept Lake Bardawil as the *Yam Suf* of the Hebrew script, the Wanderings of the Israelites, the quail and manna episodes, the law-giving and even the engulfing of the Egyptian host fit into each other like the parts of a jigsaw puzzle.

The Bardawil Lake, which is forty-five miles long and thirteen miles wide, has large masses of rushes in places along its southern shores, and therefore may possibly be the Yam Suf, the Sea of Reeds, in which the Egyptians were engulfed. The name therefore is in its favour. It is really an enormous clay pan some six to ten feet below the level of the Mediterranean Sea and separated from it the whole length by a very narrow strip of sand which varies in width from one to three hundred yards. At the present time the lagoon is used as a mullet fishery and is kept filled with water artificially by cutting channels through the sandbank, but the normal condition of the lake is a vast salt-encrusted pan. It will support people walking and a small camel, but definitely not wheeled traffic. At sight it looks as if it would but I have tried it repeatedly in my car and gone through every time. Even after fourteen years experience I was caught in that bog just about five days before I left Sinai.

A sand-spit divides the clay pan from the Mediterranean, the spit being about 100 yards wide. The Israelites were making for Palestine and they had the choice of two routes, one along the sand-spit by the sea, the other to the south where the wells are. The route just south of the clay pan is the better of the two and the one generally used. At the present time the route is more or less covered with sand-dunes, but the sand is believed to be of more or less recent origin it is possible that in those days it was a recognized and well-trodden highway. Moses very probably selected the route along the seashore as being further away from the Egyptians, and thus providing him with a few extra hours in his flight.

Exod. xiii 17 and 18, rather lends colour to this view:

" And it came to pass that when Pharaoh had let the people go, that God led them not through the way of the land of the Philistines, though that was near; for God said, Lest peradventure the people repent when they see war, and they return to Egypt.

" But God led the people about by the way of the wilderness of the Red Sea ; and the children of Israel went up harnessed out of the land of Egypt."

I think it is a reasonable explanation of those two verses. If you have a perfectly straight route with wells every twenty miles that is recognized as the road to Palestine, I think you may decide on the more circuitous route with only one well on the road round by thenorth of the Bardawil Lake as being " about through the way of the wilderness of the Sea of Reeds."

The Israelites were fleeing along the narrow spit of sand towards Palestine. They were seen by the scouts of the Egyptian Army and on the information being reported the Egyptians started to cut across the clay pan to head off the Israelites, and were almost immediately in difficulties. They " took off their chariot wheels that they drave them heavily " (Exod. xiv 25) is a good description of an army with chariots that have become bogged in soft going.

Reference to the book of Numbers will show that the disaster to the Egyptian host did not occur, as is commonly supposed, in a few minutes. They were in trouble for something like twelve to eighteen hours before the sea came on them. Then Moses lifted up his hand and the sea came back on them and swallowed them up. With regard to that, we know there was heavy rain at the time and dense cloud. My theory is that the rain made the surface of the clay wet so that the Egyptians were more hopelessly bogged than ever ; that the sea also broke through the sand-spit in six or seven places and flooded the whole of the depression just as it does to-day. I cannot say how long it took to drown the Egyptians. I should imagine that the clay pan filled up in about eight to nine hours. They were hopelessly bogged in the mud and with six to ten feet of sea water flowing over them you can well imagine that put an end to the Egyptian host.

There are various theories with regard to the pillar of fire and cloud. Some suggest torches, others a column of dust raised by the marching host. It has even been said that it was a big pan of burning naphtha that Moses had brought back with him from his previous visit to Sinai ; where he had stored it during the intervening years I do not know ! It must have been a very extensive cloud for we are told that it settled down between the Israelites and the Egyptians ; that it was as black as night over the Egyptians and white and shining over the Israelites.

My theory is that the pillar of cloud by day and the pillar of fire by night were the phenomena of one of the violent storms that come up on the Sinai coast in the spring. They generally take four days to work up. There is a remarkable cloud formation—a huge column of cumulus, black in the centre with hard white edges. This column, which begins at the skyline and extends to the zenith, is most impressive, as it is constantly rent with lightning and at night is an intermittent blaze of fire—in other words, a pillar of cloud and of fire. The cloud forms out at sea, and it does not matter if the wind is north, east or west, as whatever the direction, it slowly moves southward towards the land. I have seen this cloud last year and every year since I have been in Sinai, and I have known it in existence for three days before the storm burst. It is quite probable that this cloud appeared to the Israelites to be a sign from the Almighty to show them the way, and it also proved their salvation as it heralded the heavy weather that accounted for the engulfing of the host.

That is something that could happen to an army to-day if it were foolish enough to attempt the crossing of the pan at such a time.

With regard to the other miracles of the Wanderings, Aaron's Rod, the Burning Bush, and the Striking of the Rock, I have no theories. All I can say is that I have actually seen an example of striking of the rock. Whilst on patrol in Southern Sinai some of the Sudanese Camel Corps had halted in a wadi and were digging in the loose gravel accumulated at one of the rock sides to obtain water that was trickling through the limestone rock. The men were working slowly, and the Bash Shawish, the Colour Sergeant, said : " Give it to me," and, seizing a shovel from one of the men, began to dig with great vigour, which is the way with non-commissioned officers the world over when they wish to show their men what they can do, and have, incidentally, no intention of carrying on for more than two minutes. One of his lusty blows struck the rock, and the hard polished face that forms on weathered limestone when it is kept moist cracked and fell away in huge slabs, exposing the soft porous rock beneath, and out of the porous rock came a great gush of clear water. It is regrettable that these Sudanese Camel Corps, who are well up in the doings of the prophets and who are not particularly devout, hailed their N.C.O. with shouts of : " What ho, the Prophet Moses ! " This is a very feasible explanation of what happened when Moses struck the rock at Rephidim.

That is as much as I now have to say on the subject and I thank you for your attention.

Discussion

Professor Yahuda expressed appreciation of Major Jarvis' illuminating lecture. Evidently the lecturer had set himself to study the question on the spot. His identification and description of the phenomena were so striking that one could hardly imagine better evidence for the truth of the records in Exodus and of some of those in Numbers. Major Jarvis' theory deserved more consideration than many other theories on the subject.

The speaker wondered whether Major Jarvis had endeavoured to identify all the places mentioned in Numbers or Exodus. He could not imagine that the place-names had been invented hundreds of years after the Exodus nor could he imagine they were known later than the time when the book of Exodus was written. Personally he thought the records of the Pentateuch were very old and genuine, and in his experience evidence from outside the Bible always confirmed and never contradicted the Bible. If one did not find confirmation or synchronistic records of the Israelites in Egyptian or Babylonian documents it was simply because there were not enough documents or because the Egyptians were not interested in the Israelites.

Major Jarvis' theory was certainly very sound and it seemed that many of his views must be taken as conclusive. The natural phenomena in the desert of Sinai had not changed ; They were the same as they had been 3,000 or 5,000 years ago.

It did not seem to Professor Yahuda that Sir Flinders

Petrie's theory that *alaf* in Hebrew could also mean family could be sustained either by philological or other proofs. The only possible theory was that numbers had been exaggerated, and of that there were several instances in the Bible, it being clear that in many cases the exaggerations had been made much later than the event recorded. The numbers in Exodus could not be taken literally. But the fact that 600,000 could be taken for 6,000 was no obstacle to belief in the genuineness of the records of the Exodus.

It was not easy to explain names etymologically. The name *Hellal* might be Arabic and might signify " permitted one " or something else. The Arabs might have transformed an old Hebrew, Canaanite or Midianite word into an Arabic word. There were instances in Arab countries of old Assyrian names having been adjusted by the Arabs so that they had no Arabic meaning which had anything to do with the original word. Then it might be, if *Hellal* meant " permitted one ", that it was a tradition with the Arabs that that was the mountain where it was permitted to hunt, whereas the other mountain, which was considered the Holy Mountain, was a reserve.

The description given by Major Jarvis of the supposed Sea of Reeds coincided almost literally with the description given in the second book of Moses. Altogether, it seemed that many details which had hitherto not been very clear would become plainer when one took into consideration the interpretation which Major Jarvis had given.

THE REV. R. S. CRIPPS did not speak as one who had been convinced so much as charmed by the ideas which Major Jarvis had put forward. Did Major Jarvis think it likely that the condition of the clay pan in spring or summer was likely to be the same now as some centuries ago ? *Yam Suf* was the name given in Numbers to the Gulf of Akaba, and it seemed difficult for it to be used of a lake near the Mediterranean. Then there appeared to be much difference of opinion as to what the Sinaitic Peninsula was actually like in the south. Was there a fertile valley there where flocks and so on could feed ? Was there plenty of grass for grazing or was there not ?

MR. EDWARDS thought Major Jarvis' explanation would fit in if one placed the site of the Egyptian disaster even south and west of the Bardawil Lake. It had to be remembered that the Mediterranean was a tideless sea and if there was a great storm that flooded the area the pan would doubtless soon afterwards be dry again. The facts cited with regard to quail were illuminating and it was to be hoped that Major Jarvis would continue to work out his conclusions. He certainly had a unique experience of the deserts of Sinai.

Colonel Lane pointed out that there were two verses in Exodus which supported Major Jarvis' theory. First (Exod. xiii 18) " and the children of Israel went up harnessed "—five in a rank. The spit of land which Major Jarvis had described would exactly fit in with that. Secondly (Exod. xiv 29) " and the waters were a wall unto them on their right hand and on their left." That, again, fitted in with the Children of Israel walking along that spit of land. One could realize how the Children of Israel were living if one considered what actually happened in India at the present day. The Children of Israel were untouchables so far as the Egyptians were concerned. To-day the untouchables in India lived outside Indian villages. The Children of Israel were not affected by the plague which destroyed so many Egyptians because they lived outside. They had their own water-supply, and in the First Plague they were not dependent on the Nile. The plague of dust storms did not affect the cattle of the Children of Israel because they were outside and dust storms were always local in extent.

Colonel Clarke said he had often wondered what was meant by Moses giving the signal, raising his hand and the waters coming back. He did not know how high the sand-spit was above the level of the sea but wondered whether it was possible that the Israelites might have been set to work to dig breaks at some narrow places and not quite let the water in until Moses saw the Egyptians were in the right spot and then raised his hand to give the signal for the water to be left through ?

With regard to numbers he personally thought Professor Flinders Petrie's suggestion as to families fitted in very well.

As to the Wanderings twenty-six places were mentioned in the Bible as having been visited during the Forty Years. He had taken the trouble to ask an Arab in Transjordan how many places a Bedouin tribe would go to in forty years nowadays, and the Arab had replied that a tribe would sometimes stay a year in one place ; perhaps only three weeks, and that it was quite possible for a tribe to visit twenty-six places in forty years.

As to there being in the south wide wadis with grazing grass, the answer was definitely " No." There was a certain amount of wild thyme and tiny shrubs sufficient for goats and ibex to graze on, but too poor for sheep. There was no wadi in Southern Sinai which could be properly cultivated, with the exception of the one or two round the Monastery of St. Caterina, and they were very small in extent ; in fact, there were not fifty acres of decent land in the whole of Southern Sinai.

As to cutting through the sand-spit, it could be done but would be a big job. Given 100 yards and 26,000 men provided with shovels, they might cut through in about twelve hours ; even then an engineer would be needed to measure out each man's job. The sand-spit was not high ; about two feet above the level of the Mediterranean. When one walked or rode along it there was the great lake stretching to one's left and the Mediterranean Sea on the right, so that one definitely had the feeling of the sea being " a wall unto them on the right hand and on their left."

Major Jarvis, in replying, said he had not had time to mention places he had identified with the Wanderings. There was, for instance, the Wadi Feiran, which was supposed to be the wilderness of Paran where the Amalekites were defeated. In Northern Sinai there were to-day a number of names meaning nothing in Arabic and which closely resembled place-names mentioned in Numbers. They were Kadeis, which had already been accepted as Kadesh Barnea ; Hazira, which might be Hazeroth ; Hariedin, which resembled Haradna ; Libni, which might be Libnah ; Rissan Aneiza-Rissah ; Arish-Alush, &c. All those places were situated in the triangle of cultivated land he had suggested as the probable site of the Wanderings.

As to the Bardawil Lake, the level had actually changed several times. It fell, in the first and second centuries, twenty-seven feet, and that was in common with the rest of the coast of Egypt. It had since risen fourteen feet. The level might now be the same as 3,500 years ago, or it might not.

Major Jarvis added that he could not agree that the Gulf of Akaba had been identified as the Reed Sea. He did not think that could be so because it was stated that the Israelites went out by way of *Yam Suf*, the Reedy Sea. He agreed that Eloth was Akaba. There were definitely no reeds in the Gulf of Akaba. He had fished all over it.

The Chairman felt sure all present were grateful to Major Jarvis for his interesting lecture. Personally, he was prepared to subscribe to the theory the lecturer had put forward ; it seemed perfectly tenable and to fit in with the ancient record.

The vote of thanks having been most heartily accorded, the proceedings terminated.

JEBEL SERBAL. ACCEPTED AS THE MOUNTAIN OF THE LAW UNTIL THE 4TH CENTURY A.D.

THE NARROW STRIP OF SAND DIVIDING THE MEDITERRANEAN FROM LAKE BARDAWIL

THE FORTIFIED ZONE OF THE PLAIN OF ESDRAELON

A Commentary on the Map of Historical Sites and Roads, Haifa–'Akka District

By Julius J. Rothschild

Since times immemorial the plain of Jezreel, or as it is called in Greek, Esdraelon, was the battlefield of many nations and tribes. Even in 1918, towards the end of the Great War, Field Marshall Allenby made a great drive there against the Turks and forced them to abandon Palestine. Beduin tribes were always fighting for the plain, as the vast area contained one of the best pastures in Palestine with sufficient water for cattle, an exception in the Holy Land.

Until more or less recently, that is to say until the modern Jewish cultivation of this area, large tracts of land were lying waste, a paradise for all kinds of wild animals. Innumerable herds of cattle and camels and flocks of sheep and goats could be seen grazing in the plain whilst the black tents of the Beduin shepherds crowned the adjacent hills. In the spring thousands of storks assembled there on their way to Europe, as the plain supplied food in abundance, such as mice, frogs and lizards.

In ancient times the possession of the plain of Esdraelon was important, because he who had it was in control of the important highway from Egypt to the north, a fork from which led to the east towards Assyria. There is no doubt that the plain was always cultivated in ancient times and the many traces of ancient villages lead to the conclusion that the plain was well populated. These facts explain why so many hot battles were fought in and around it from Biblical times to our days. It was here that King Saul lost his life, that King Josiah was conquered by Pharaoh Necho, that King Ahaziah was mortally wounded during the battle against Jehu, and the Jewish captain Barak, accompanied by the Jewish poetess

Deborah, won his famous victory over Sisera. Near the spring of Harod, Gideon fought against the Midianites and Amalekites " who filled the north of the valley like a multitude of grasshoppers, with camels as innumerable as the grains of sand on the seashore." (Judg. vii, 25).

It was even in much earlier times that the Egyptian kings advanced to the north and fought for the possession of the plain, Tuthmosis I (1530 B.C.), Tuthmosis II (1490 B.C.), Tuthmosis III (1504–1450 B.C.), Sethos I (1308–1298 B.C.), Rameses II (1292–1225 B.C.), Merneptah (1225–1215 B.C.), and last but not least the Israelites under the command of Joshua.

The Assyrian kings came from the east, the Greeks from the north ; and were later followed by Mongols, Romans, Arabs, Crusaders, Turks and others. There is surely no other area on earth where so much blood has been shed in times gone by as in the plain of Esdraelon. The plain is a perfect battlefield, vast in extension and well protected by nature, having rocky mountains on all sides with the exception of the east and north, which parts are open to any intruder, and had to be fortified in order to make any access from these directions as difficult as possible.

Which people of historic or prehistoric times constructed the first fortresses for the protection of the plain is unknown, and can perhaps only be revealed by thorough excavations which, in future times, may disclose their origin.

The plain of Esdraelon forms an irregular triangle with a base-length of twenty-four miles, being open to the east towards the river Jordan, and to the north-west towards the plain of ʻAkka. It figures in the Bible under the name of Plain of Megiddo, and is called by the Arabs *Merdj Ibn ʻAmir*, *i.e.*, Plain of the son of the Prince, but which prince is unknown. The present name is Emek Jezreel or Plain of Jezreel, as in olden times, named after the town of Jezrael which belonged to the tribe of Issachar (now Zer'īn, a village of no importance).

Along the north-eastern border the hills of Lower Galilee form a natural protection whilst to the south-west and south Mount Carmel with the mountains of Gilboa are a natural hindrance for any invading army, if this army cannot force its way, either through the narrow valley through which the brook

Cison winds its way, through the similarly narrow plain of Dōthan near Jenīn, or from the south-east from the Jordan valley. It was thus that first of all these three open spaces had to be closed by strong fortresses which were Beth-shān[1] in the south-east, Jenīn in the south, and Megiddo in the north-west. Beside these main bases we observe on our map quite a number of minor fortifications which, on the other hand, were advanced forts which were constructed for the purpose of checking of an attacking army before it could approach the main base. Beside these main fortifications near the most endangered zones of the plain of Esdraelon, we see some other strongholds for similar purposes, namely 'Akka on the highway to the north, Haifa, 'Atlīt, Tantūra and Cæsarea on the seashore towards the south ; the last place has not been marked on our map as it surely served purposes other than merely for the protection of the plain of Esdraelon.

Advancing armies from the south mostly followed the ancient highway along the coast towards Haifa, and turned at Carmel towards Megiddo in a south-eastern direction, towards 'Akka to the north. We know of one exception in early history, namely the advance of Tuthmosis III when he attacked Megiddo in 1479 B.C. He decided to lead his army over Mount Carmel through the Wadi 'Ar'a, a most dangerous undertaking which he successfully overcame by personal bravery.

The Israelites under Joshua advanced from the south towards the plain of Esdraelon and conquered Megiddo, Carmel (a fortress not yet fixed) and Yokneam, but were unable to dislodge the inhabitants of these fortresses which, so it seems, were strong enough at that time to prevent the occupation of their cities.

The Assyrian kings advancing from the east surely used the ancient highway which leads through the Wadi Ḥamām at the northern end of the lake of Galilee, and marched towards Shefa 'Amr where they reached the north-western entrance to the plain.

The Greek and Syrian armies could be checked by 'Akka and could reach the plain only after having compelled the surrender of that strong city in the north of Palestine.

Our map shows clearly that all approaches leading to the plain of Esdraelon were well protected and that a clever strategic plan was underlying the construction of that range of fortresses or forts we now shall describe.

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[1] See Alan Rowe, *The Topography and History of Beth-Shan*, 1930.

On the highway from the south to the north and thence to south-east towards the plain of Esdraelon we find the following once fortified spots :

Ṭanṭūra, (Arabic طنطورة Hebrew דור) the ancient Nephetdora (Josh. xi, 1 ; xii, 23 ; 1 Kings iv, 11 ; 1 Macc. xv, 11).

The Hebrew name דור means a dwelling place. Dor was a strong fortress, its relics are still scattered about in the village and its vicinity. In the time of Ḥeri-Ḥer, chief priest and king of the XXIst Egyptian Dynasty, Dor—called Dir—was in the hands of the *Thakar*, a Mediterranean race allied with the Philistines.

'Atlīt, (Arabic عتليت), the *Castrum Peregrinorum* (Pilgrims Castle) of the Crusaders. The still existing remains of the castle show that it was not easy to capture. The Crusader castle was built by the Templars in A.D. 1218, on the foundations of a much older building. Recent excavations have revealed the fact that the place was occupied in times previous to the Crusaders by Phœnicians and Romans. The name 'Atlīt is already mentioned by Abu'l Fēdā, and Yaqūt who uses also the name Ḥusn el-aḥmar[1] for the fortress. Local tradition mentions a prince Jemāl ed-Dīn as a lord of 'Atlīt previous to the Crusaders, who is also titled Melik esh-Shiḥ, after his mother Shiḥa who used to reside in a castle now called *Khirbet esh Shihah* situated on one of the slopes of Mount Carmel.[2]

Tell es-Samaq, (Arabic تل السمك) probably the ancient Sycaminos (or Sycaminus) often mentioned in history. The Arabic name means Hill of the Fish, but is surely garbled, as the Greek name means a place where sycamores grew. The tell has not yet been examined scientifically.

Thence the highway turns around Carmel point towards the plain of Esdraelon.

There is no doubt that the promontory of Mount Carmel

[1] Ḥusn el-aḥmar=The Red Castle.

[2] 'Atlīt is being excavated by the Department of Antiquities; *cf.* C. N. Johns in *Quarterly of the Department of Antiquities in Palestine, II*, 1932.

was fortified before the Carmelite monastery was built,[1] and I presume that a fort stood on the same spot where now the hostel *Stella Maris* of the Carmelite Order is built. Further investigations on this matter will be carried out by the present writer as soon as circumstances allow.

Haifa (Arabic خيفا Hebrew חיפה). The Hebrew name derives from חוף which means simply Beach. The ancient Haifa was situated on a peninsula between the present Bath Galim and the German cemetery, which area is still called Haifa-el-‘Atīqa. Some scholars believe the Sycaminum mentioned before was on this peninsula. The ancient highway passed south of Haifa el-‘Atīqa, when the modern town of Haifa did not yet exist. The ancient Haifa, which was a small village of fishermen, was fortified by the Crusader prince Tancred. From this time onwards the military highway led through the mediæval town which had two entrances. A small fort stood on a steep hill overlooking Haifa of which ruins still exist; its name was Burdj es-Slām (Arabic برج اسلام). The Castle of Islam; it was built by Dhaher el-‘Amr, prince of ‘Akka and lord of Haifa.[2]

From Haifa towards the south-east along the highway which leads to the plain of Esdraelon we have to mention the following once fortified spots:

Rushmia (Arabic رشميا). The meaning of the name is unknown. A tell in the Wadi Rushmia with the ruins of a Crusader fort which was built on the remains of an earlier building. The site has not yet been thoroughly investigated, but relics of Phœnician and other periods have been found in and near the ruin. It seems that the fort was built for the protection of a village which has entirely disappeared but traces of which are still visible. At the same time the fort was built to prevent any access to the highway through the Wadi Rushmia.

Tell Abu Mudawwar (Arabic تل ابو مروَر). The Arabic name means "Father of the Circle" or Ring. A very old fort of which ruins still exist. The name is derived from a cromlech which is still visible about 350 m. south of the tell. This cromlech belongs to the prehistoric sacred place of A'raq ez-

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[1] See Julius J. Rothschild, *History of Haifa and Mount Carmel*, Haifa 1934.

[2] See Addendum. p. 54.

Zighān (Rock of the Crows). The fort was built in order to protect the highway against invaders trying to force their way through the Wadi Khallet ez-Zerīsy.

Tell el-Adis (Arabic تل العرسة). The name means Hill of the Lentils. The small fort commanded the Wadi ’t-table which leads towards the highway. The remains of a building show indications of the Crusader period.

Beled esh-Sheikh (Arabic بلد الشيخ), named after a Mohamedan saint Sheikh Abdallah es-Saḥ’ly whose weli is in the village which is inhabited by Fellaheen. Nothing is known of this site.

(There is a place Palmarea near Haifa mentioned by Crusader historians, of which no traces can be found, but which may have derived its name from the palm-grove opposite Beled esh-Sheikh, between the village and the sea, north-east of Haifa).[1]

Khirbet Aqqara (Arabic خربة عقرة). The Arabic name means Barrenness. Ruins of a mediæval building, probably a fort, are still visible, besides the remains of an old tower. The length measurements of the foundation walls are 200 × 80 m.

There are four minor formerly fortified spots on the lower hills of Mount Carmel, namely Khirbet esh-Shumariyeh, Khirbet esh-Shemaliyeh, Khirbet esh-Sharqīeh and Khirbet ez-Zuhluq, of which nothing is known; even their ancient names have been lost. The masonry has been destroyed and the stones carried away by the Arabs for building purposes.

No investigations have been made up till now with regard to origin and situation of these sites.

Other once fortified spots on the margin of Mount Carmel and on the summit towards the ancient highway are:

Qal’at el-Menābir (Arabic قلعة المنبر); the name means Pulpit Fortress. Little is known about its origin; the castle was destroyed but the remains of it were still used as a protection by the Druses when fighting against Ibrahim Pasha of ‘Akka in A.D. 1831.

Ma’serat el-‘Adm (Arabic معصرة العظم); the name means

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[1] *La paumerie*; *Palmarea* (*Regesta regni Hierosolymitani* “ *locus palmarum non mediocris exstitit et mox ultra 3 milliaria ipsa Ptolomaida*,” Theodoricus, ed. Tobler 90, map of Oxford, ibid. XVIII). The place is mentioned as a meeting place of the Crusader pilgrims.

Bone Press, probably a nickname for a place " where bones are cracked," *i.e.* a dangerous place. (May be in memorial of a battle.) Remains of walls and other relics can be seen on the spot ; but nothing is known of its past.

Khirbet el-Kēraq (Arabic خربة الكرك). The name is derived from the Aram. כְּרֵכָא = castle. (also קיר = wall ; 1 Kings vi, 5 ; Josh. ii, 15 ; Jes. xxv, 4, &c.). Once the strongest fortress on Mount Carmel ; rebuilt in Crusader times ; constructed similarly to that of 'Atlīt. Nothing is known of its past.

Khan 'Ala ed-Dīn (Arabic خان علاء الربن) meaning the Caravanserai of 'Ala ed-Dīn. Which 'Ala ed-Dīn is meant is unknown. The site is covered with débris in abundance ; seems to have been an old and important stronghold.

Khirbet ed-Dawābe (Arabic خربة الرواية). The name means Ruin of the Sacrifice. (Probably in connection with the Prophet Elijah and the priests of Baal). Origin unknown, but many remains of old masonry.

Khirbet el-Mansūrah (Arabic خربة المنصورة) meaning Ruin of the Victorious (Lady). Was, as can be judged from the remaining masonry, a minor fort ; of unknown origin.

Dāhr maghāret umm 'Ahmad (Arabic ظهر معارة ام احمد) meaning Dwelling Cave of the Mother of 'Ahmad. A strong castle with a square tower stood on the plateau of the tell. A double rampart was built around the castle. There are many caves and ancient tombs nearby, but little or nothing is known of the place.

Yagur (Arabic ياجور). The name is derived from the Hebrew יגר which means A Heap of Stones (Gen. xxxi, 47). Arab village with a modern Jewish settlement in its vicinity bearing the same name. Nothing of importance is known of that village.

We now arrive at a double fortification of the highway towards the plain of Esdraelon namely :

Jelāmed el-'Atīqa and *Tell el-'Amr* at the point where the highway turns to south-east, commanding the narrow gorge which leads into the plain. Both places seem to be of great antiquity.

Jelāmed el-'Atīqa (Arabic جلمة العتيقة). The name Jelāmed means Steep Hillside towards a Valley, el-'Atīqa=the ancient. The Hebrew גַלְמוּד means Rock, Barren Ground, Waste Spot. Isa. xlix, 21; Job iii, 7; xv, 34; xxx, 3). Little or nothing is known of its past.

Tell el-'Amr (Arabic تل العمر), meaning the Hill of Omar. There stood a fort on the hill in the middle ages which, as tradition says, was re-fortified by the Arab prince Dhaher el-'Amr, in whose memory the tell was later on named. Its ancient name is unknown. Excavations carried out by the late Dr. Schumacher of Haifa revealed middle age masonry.[1]

Then follows another double fortification of the highway, the *Tell el-Wa'r* and *Tell el-Qassis*, the former on the western side of the highway and the latter on the eastern side, both commanding the gorge between Mount Carmel and the hills of Lower Galilee.

Tell el-Wa'r (Arabic تل الوعر), which means Area of Difficulties. Two different forts stood on the hill of which ruins still exist. The foundations of one building, the axis of which was from north-west to south-east, show a measurement of 43 × 7 m. The foundations of the second building are buried in the ground. The origin of the fortifications is unknown.

Tell el-Qassis (Arabic تل القسيس). The Arabic name means Hill of the Priests. Tradition places here the slaughtering of the priests of Baal by the Prophet Elijah, as the site corresponds exactly with the report of the Bible narrative. (1 Kings xviii.)

Both tells are not yet thoroughly examined. Next follows:

Jelāmed el-Mansūrah (Arabic جُلامد المنصورة). The Arabic name means the Jelāmed of the Victorious.[2] This is believed to be the site of the fortified camp of Vespasian (A.D. 67). El-Mansūrah is the fem. of Mansūr and means the Victorious Lady, but which lady is unknown.

On the western side of the highway south of Jelāmed el-Mansūrah is the *Tell Qaimūn* (Arabic تل قيموت). The name may derive from the Hebrew קָמים which means Enemies, Opponents, Assailants. (Ps. xviii, 40, 49; Jer. li, 1; Job xxii, 20.) It is supposed to be the site of the Biblical Yokneam.

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[1] Dr. Schumacher made only a trial section of the tell.

[2] For Jelāmed see above Jelāmed el-'Atiqa.

(Josh. xii, 22 ; xix, 11.) The tell is still untouched and parts of the old walls are visible within the ground on top of the hill. This fortified hill is the last before we arrive at the main fortress of Megiddo for which protection it surely was built.

Megiddo (Arabic تل المتسلم =tell el-Mutessalim),[1] which means the hill of the Commander or Governor. The name Megiddo is associated with the Hebrew גדוד which means a Band of Warriors, a Troop or Battalion. (Gen. xlix, 19 ; 1 Sam. xxx, 8, 25 ; 2 Sam. iii, 22 ; Micah. iv, 14.) The history of the fortress is sufficiently known and it is not intended to deal in detail with it. It was beside Beth-shān the strongest fortress of the plain of Esdraelon. Megiddo is a typical Canaanite fortress and thanks to excavations carried out by the Oriental Institute of the University of Chicago, now directed by Gordon Loud, we have a thorough knowledge of an ancient fortress which has been in possession of the Canaanites and many other successive nations till it became a Roman stronghold.

The different fortifications along the highway towards the plain of Esdraelon which we described were built in ancient times in order to check any advance of an enemy army threatening Megiddo and by this, the plain of Esdraelon. We now see clearly on our map that another range of fortified spots had been built not only to protect the main base of ‘Akka, but chiefly for the purpose of preventing the landing of troops on the seashore between Haifa and ‘Akka. Others situated more inland are placed for the protection and control of important highways leading north, east or south.

Some believe that these ancient places were Phœnician villages built along the seashore, and that the dunes between the range of tells and the sea were deposits of the Nile. After careful inspections and observations during nearly thirty years I have come to the conclusion that this theory is wrong, as the deposits of the Nile consist entirely of mud, and the drift of the Nile towards the Palestine coast ends at Carmel point. But beside this fact we have sufficient proof from examinations and from reports of historians that these hills were fortified ; their situations were strategically well planned and leave no doubt of the purpose for which they were intended. In the following description of each of these tells we will try to give some account of the origin of their names and their signification.

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[1] Mutessalim is the Turkish word for Governor.

The first of these range of tells between Haifa and ʻAkka is the *Tell Abu Huwam* (Arabic تل ابو حوام). The Arabic name may be derived from the Hebrew חומה meaning a Wall. It is a usage of the Arabs to call a possessor of something its father (Abu), for example Abu Rikha (Banana) The Father of the Smell. The small tell is situated near the outflow of the river Kishon. Recent excavations (see R. W. Hamilton in *Quarterly of the Department of Antiquities in Palestine, IV*) revealed beside other finds, also relics of Egyptian times. (Clasps of about 1100 B.C., ancient glassware and a bronze idol of Greek origin.)

Tell el-Naḥl (Arabic تل النخل). The name means Hill of the Palmtree.

Tell es-Subāt (Arabic تل الصباط). Meaning of name uncertain, perhaps Hill of the Vaulted Passage.

Tell el-Khiār (Arabic تل الخيار)=Hill of the Cucumbers. Perhaps in connection with its shape.

Tell Kurdaneh (Arabic تل كردانه). Meaning of the name unknown. It may be that the hill was named by the Arabs after a regiment of Kurds camping here during the siege of ʻAkka by Saladin (A.D. 1189) who was himself a Kurd. Remains of a tower probably of Crusader origin have been found by Guérin. Not far from the Tell Kurdāneh is the Khan Kurdāneh an old caravanserai of which only ruins exist (called by the Crusaders *Recordana*). Between Tell el-Khiār and Tell Kurdāneh is the site of *Jidru* (Arabic جدرو).[1] The name derives from the Hebrew גדר which means "a Rampart marking the Boundary."

Khan Da'ūk (Arabic خان دُعوق). Perhaps the Beth Dagon of Josh. xix, 27. (In Hebrew בית דגון.) The Philistine deity Dagon was worshipped by the fishermen of the Phœnician coast as their patron. The village of Doc (which has since disappeared) was inhabited by Crusaders (Templars).[2] Sultan Bibars destroyed the Tower of Doc.[3] (A.D. 1263.)

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[1] See Addendum.

[2] See R. Roehricht, *Geschichte des Koenigreichs Jerusalem*, p. 691.

[3] Ann. de Terre Sainte 451.

Tell el-Fukhkhār (Arabic تل الفخار). The Arabic name means Tell of the Pottery. The hill was named by the Arabs Tell el-Fukhkhar because of the many potsherds (ranging from the Middle Bronze period onwards) scattered on its surface. The tell has not yet been examined but may contain surprising relics. The Crusaders who camped here during the siege of ʻAkka (A.D. 1191) called the hill Tell Fokher; it is supposed to be the site where the Crusader fort Toron de Dame Joliette stood. In 1799 Napoleon I placed his cannons on top of the hill and bombarded ʻAkka. The hill must have been fortified for the control of the highway ʻAkka-Safad.

ʻ*Akka* (Arabic عكة Hebrew עכו). Main fortress in the north of Palestine built on a rocky peninsula.[1]

Tell el-Tantūr (Arabic تل الطنطور). Second fort for the control of the highway ʻAkka-Safad. The name may be derived from its shape which is similar to a headwear of the Druse women called Tantūr.

Tell el-Gharby (Arabic تل الغربي). Meaning: Western Hill. Fort for the control of the highway ʻAkka-Tiberias. Not yet examined.

Khan el-ʻAitawiyeh (Arabic حان الأبروية). Little or nothing is known of the place. The name refers to a woman. (Perhaps once the owner of the caravanserai).

Tell Keisān (Arabic تل كيسان). The meaning of the name is unknown, perhaps derived from the Hebrew כיס which means a Hidden Treasure. Professor Garstang thinks the site is the Achshaph of the Old Testament. Trial excavations were made in 1936 by the Neilson Expedition to the Near East. Although no extensive work could be done, remains dating from Early Bronze times to the Early Hellenistic era were discovered.[2] In A.D. 1189 Sultan Saladin camped on the tell.

Shēfa ʻAmr (Arabic شفا عمر). The name of the village was שפע־רם in ancient Jewish time and means Multitude of the Summit. Shēfa ʻAmr is a very old fortified spot and commanded the highway ʻAkka-Tiberias. Numerous tombs, ruins and remains of many ages including a mediæval castle and a fort built by Dhaher el-ʻAmr proved that the place was of importance. It may be that the village was named Summit of 'Amr after that prince who ruled the district in the beginning of the eighteenth century A.D.

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[1] See Julius J. Rothschild, *A History of Akka*, 1937.

[2] See *Quarterly of the Department of Antiquities in Palestine V*, pp. 207 ff.

Burdj es-Sahl (Arabic برغ السهل). The Arabic name means the Castle of the Field. Nothing is known of the past of this place.

Kefr 'Atta (Arabic كفرتا). Perhaps named after the Canaanite goddess 'Attā. (*Cf.* W. F. Albright, in *The American Journal of Semitic Languages*, XII, No. 2, pp. 73 ff.). Remains of ancient ramparts are still visible.

Khirbet Sherta (Arabic خربة شرطي). The name is derived from the Hebrew שטר which means a Commander (2 Chron. xxv, 11). This proves that the place had a garrison in ancient times.

Khirbet Husheh (Arabic خربة هوشه). Named after a Muslim saint Sheikh Husheh. (Perhaps originally Hosea ?)[1]

Majdal (Arabic مجدل). The name is derived from the Hebrew מגדל meaning Tower. Nothing is known of the past of that site.

Tell el-Fār (Arabic تل الفار). The Arabic name of فارة means mouse, but I presume that the name is garbled from the Arabic نوّار which means a Spring of Great Power. Another version is that the name derives from the Hebrew בעל פעור Baal Peor, a pagan deity of the Moabites in whose honour the maidens of Moab sacrificed their virginity. (Num. xxiii, 38 ; xxv, 3.)

Tell el-Harbadj (Arabic تل الحربج). The Arabic name means Hill of the Warrior, which proves that the place was garrisoned in bygone times.

Tell es-Semn (Arabic تل السمن). The Arabic name means Hill of Butter, but I believe that it is derived from the Hebrew זמן which means a Mark or a Land Mark.

Khirbet Sasa (Arabic خربة سعسع). The Arabic name means To rule a People. It may be that its name is derived from the Hebrew שאת which simply means an Elevation.

Khan es-Suleimān (Arabic خان سليمان). The Arabic name means Caravanserai of Solomon (Arabic سليمان). A man of this name was perhaps in olden times keeper of the caravanserai; its original name is unknown.

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[1] During the third century A.D. Ushā and Shēfa 'Amr were centres of Jewish life, the Sanhedrins used to meet there.

'*Abtun* (Arabic ابطن). The name may be derived from the Hebrew אבדון which means Place of Defeat, which indicates that the place was conquered, or that fighting took place here which ended in defeat of the enemy. Nothing is known of its past.

Sheikh Abreik (Arabic شيخ ابريك). Its ancient name is unknown. There is a Weli of a Muhamedan saint Sheikh Abreik in the village which before the place was bought by Jews, consisted of only a few Arab houses. It is a place of great historic interest. Jewish historians of modern times believe it to be the Gaba of Josephus (Wars III, 3, 1 ; XV, 8, 5) where veterans of Herod the Great settled ; also called the Town of Horsemen. Others believe that the village of Beth Sheārim of the Talmud was situated on this hill. Jewish husbandmen found, whilst working on the field, a huge Jewish cemetery here (in autumn 1936), which is now cleared and has revealed Jewish tombs (*Arcosolia*) belonging to the third and fourth century A.D. Some of the tombs bear inscriptions (names) in Hebrew and Palmyrene. Tablets with Greek inscriptions were also found, and some stone gates still *in situ*. A large Menorah (Seven-branched candlestick) was discovered carved in the rock. Even before that time numerous ancient tombs were known in Sheikh Abreik, with *Loculi* and ornamented portals. Further excavations may perhaps reveal the ancient name of the place. As can be judged from the many foundations of ancient buildings still visible on the surface of the hill, the place was of importance, especially in Roman time. It surely belonged to the range of forts protecting the plain of Esdraelon as described. It is situated on the right bank of the brook Kishon and commands the entrance to the plain from the north.[1] Excavations are being continued.

Few of the sites described have been thoroughly examined. From time to time fragments of masonry, pottery, coins and other relics of historic value are discovered by chance. Systematic examinations would, without doubt, lead to a more thorough knowledge of this interesting strategic system of ancient fortresses in the north of Palestine.

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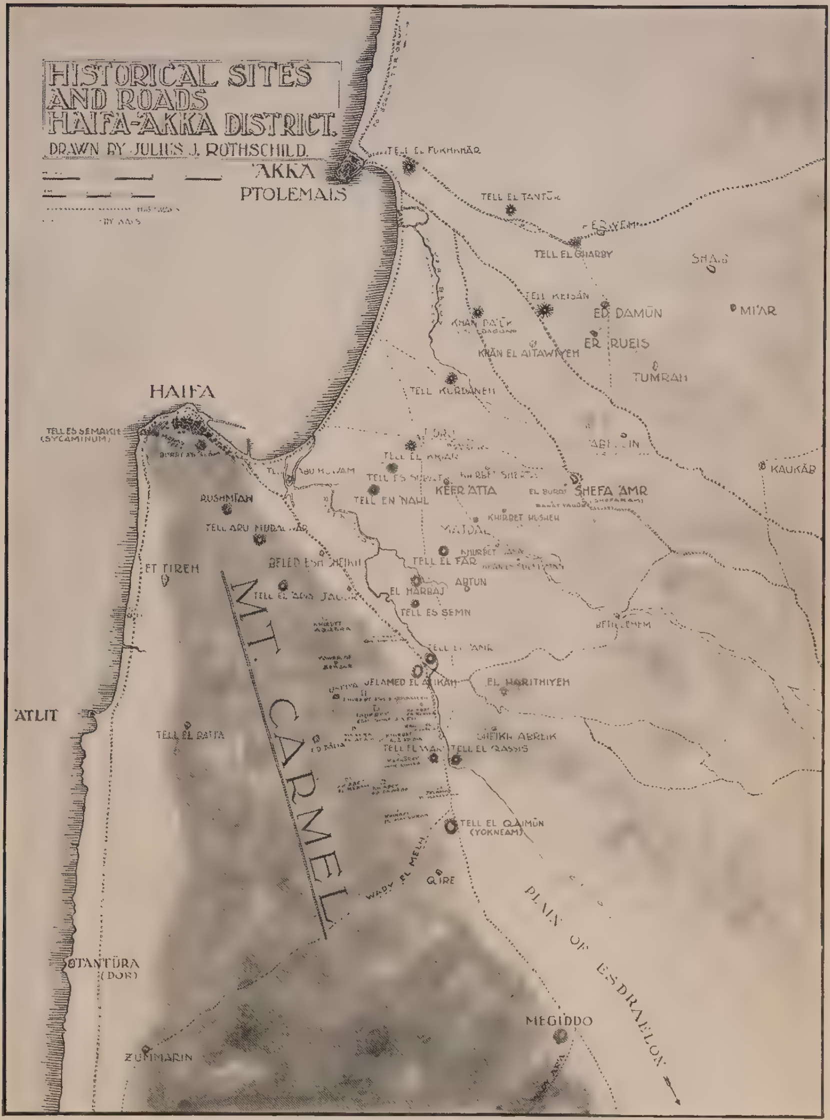
[1] Some historians believe that Sheikh Abreik was the Jewish captain Barak mentioned in Judg. iv, as the Haroseth Hagoyim is considered to be the nearby hill of Hartīyeh. I often heard the name spoken by the Arabs as Esh-Sheikh Būraq.

ADDENDUM

To p. 45. *Haifa el-Atīqa* was destroyed in A.D. 1762 by Dhaher el-'Amer, prince of '*Akka*, after a rebellion of its inhabitants against their oppressor. He ordered the building of the small fort mentioned. For this purpose the stones of the destroyed village were used. Dhaher el-'Amer compelled the inhabitants, left destitute of any comfort, to build new houses and a rampart below his new fort, on which he mounted heavy cannons to keep them in check. In this way the Haifa of to-day was founded.

To p. 51. During June, 1937, whilst this article was in the press, the present writer carried out some archaeological research work on a site belonging to the Jewish settlement *Naharia*, some 8 km. north of '*Akka*. It was then that, by chance, Jewish husbandmen of the settlement found large tracks of the ancient highway marked on our map. Further work on that site revealed parts of the ancient Roman Military highway with a well-preserved pavement and the usual side-walls, also some foundations of a building which probably served as a resthouse in ancient times. Nearby a Roman milestone was found with a partly preserved Latin inscription mentioning, besides '*Akka* (*Ptolemais*) *GEDRV* which is without doubt the *Jidru* mentioned in our article and on the map. (The newly discovered milestone has now been placed in the Archaeological Museum in Jerusalem.)


HISTORICAL SITES
AND ROADS
HAIFA-AKKA DISTRICT.
DRAWN BY JULIUS J. ROTHSCHILD.
'AKKA
PTOLEMAIS
TELL EL FUKHKHAR
TELL EL TANTUR
EL YEMEN
TELL EL GHARBY
SHA'AB
MI'AR
TELL KEISAN
ED DAMUN
KHAN DA'UK
KHAN EL AITAWIYEH
ER RUEIS
TUMRAH
TELL KURDANEH
HAIFA
TELL ES SEMAKH
(SYCAMINUM)
TELL EL AMAR
TELL ABU HUWAM
TELL ES SUBAT
KEFR ATTA
EL BURJ
SHEFA 'AMR
ABELLIN
KAUKAB
TELL EN NAHL
KHIRBET HUSHEH
MAJDAL
RUSHMIAH
TELL ABU MUDAWWAR
TELL EL FAR
ARTUN
BELED ESH SHEIKH
ET TIREH
TELL EL HARBAJ
TELL ES SEMN
BETHLEHEM
TELL EL 'AMR
MT. CARMEL
JELAMED EL ALIKAH
EL HARITHIYEH
'ATLIT
TELL ES SAFFA
SHEIKH ABREIK
TELL EL WAD
TELL EL QASSIS
TELL EL QAIMUN
(YOKNEAM)
WADY EL MELH
QIRE
PLAIN OF ESDRAELON
TANTURA
(DOR)
MEGIDDO
ZUMMARIN

MAP OF HISTORICAL SITES AND ROADS, HAIFA-AKKA DISTRICT

NOTES ON THE BEDOUIN TRIBES OF BEERSHEBA DISTRICT, II

By S. Hillelson

III. *The Tiyāha*

Tiyāha traditions of their descent are so varied as to cast considerable doubt on the historical value of any of them. Some of them claim a connection with the Medīna tribes of Aws and Khazraj, while others assert that they are of the Banī Hilāl and separated from them during their famous march to the Maghrib. [The name is derived from "Tīh," the Arabic name of the Desert of the Wilderness, and has no genealogical significance.]

One of the versions related to the author is to the effect that the tribal ancestor, Sālim, was a man of the Khazraj who settled in the Sinai peninsula in the days of the early Moslem conquests : according to another story the Tiyāha came from the east led by one named Rabāb, and five sections of the Tiyāha trace their descent to five sons of Rabāb, the remaining sections being reckoned of different origin. The five, who are regarded as Tiyāha in the strict sense of the word are the 'Iyāl 'Umarī, the Ḥukūk, the 'Allāmāt, the Badīnāt, and the Qadīrāt. There is yet another version which denies that Ḥakk and Qadīr were sons of Rabāb.

In the following the different sections are considered separately :

The Ḥukūk

The leading family or sept of the Ḥukūk are the Hazīl, who is former times claimed the leadership not only of the Ḥukūk, but of all the Tiyāha, and their position in the tribe corresponds to that of the Satūt amongst the Tarābīn. The present shaykh of the Hazīl told the author that his ancestors exercised paramount sway over the country from Jebel al-Khalīl to Wādī al-'Araba (which is said to be the border between Palestine and Transjordania) and that other tribes, when passing into Palestine on their way to Gaza, paid them dues in camels and butter. The grandfather of the present shaykh, whose name was Suleymān was hanged by the Turks as a result of complaints laid against him by the people of Gaza : he was accused of levying illegal dues on the Bedouins, and of the more serious crime of abducting women for his pleasure : he was stated to have violated no less than forty virginities.

The rivals of the Hazīl were the Banī ʻAṭīya, and the two sections were always at feud.

Another section of the Ḥukūk, the Asad, bear a name well known in the history of ancient Arabia, but it cannot be stated with any confidence that they have any genealogical connection with the Asad of old.

The ʻAllāmāt

Apart from genealogical details, which are of little interest, ʻĀrif Bey has not much to record of this section : they are believed to number rather less than 2,000, and have a reputation for bravery. Formerly the whole section was under a single shaykh, but when Salāma ibn Musa Abū Shinār was put in prison for misbehaviour in the early days of the British occupation, they split up into three sub-sections, each under a separate shaykh.

Their brands are the *khuṭām*, a double *muṭraq*, and the *ladhʻa*.

ʻIyāl ʻUmarī

Their ancestor ʻUmarī was a son of Rabāb, and is said to have been a redoubtable war-leader of the Tiyāha. His posthumous reputation nevertheless is of the worst, for no ascertainable reason, and the very mention of his name is loathed amongst the Tiyāha. It is their custom, when passing his grave, to throw stones on it (the photograph of the grave shows a vast stone-heap), and they further show their contempt by defiling the grave. To call upon his name is supposed to entail misfortunes such as being thrown by one's camel and the breaking of bones or the loss of an eye, and even the ʻIyāl ʻUmarī themselves share with the rest of the Tiyāha this loathing of their ancestor. It is related that in the old days they once visited the grave in a ceremonial manner, bringing their wives and children and driving their flocks and herds, but after they had offered sacrifices, a dust-storm arose which broke the cooking-pots, and smothered the tents, and stampeded the camels and horses: since that day they invoke curses upon ‘Umarī like the other Tiyāha. The grave is situated on the left bank of Wādī al-Abyaḍ. The fellāḥīn have a saying which never fails to rouse the wrath of the Bedawī to whom it is addressed: *Allāh yij‘alak min ‘aqd ‘Umarī*—may Allah make you one of ‘Umarī's bond!

The ‘Iyāl ‘Umarī number some 500 and are divided into two sub-sections—‘Urūr and Rawāshida.

The Nutūsh

They trace their descent to one ‘Aṭīya, for which reason they are also known as ‘Aṭāwina: ‘Aṭīya's grave is at Tabūk, and the tribe claim relationship with the Banī ‘Aṭīya of Transjordania and the northern Ḥijāz.

It appears that they migrated to Sinai under ‘Awād, three generations after ‘Aṭīya, where they acquired spacious lands—quite recently some of the ‘Aṭāwina of Beersheba have claimed these lands from the Egyptian government;—they first came to Palestine under ‘Awād's son Salīm, whose son Sālim fought against Ibrāhīm Pasha and was slain in battle.

Their numbers exceed 2,000, and they rank high amongst the Tiyāha tribes: not so long ago Ibn ‘Aṭīya was the acknowledged war-leader of most of the Tiyāha of Sinai, and he levied "*khāwa*" on the people of Gaza and Hebron. ‘Awda and ‘Āmir, two men of theirs, played the leading roles in a famous tribal war of the nineteenth century: this war, however, led to a weakening of the influence of the ‘Atāwina since it brought about the independence of the sections which previously had acknowledged their leadership.

There are others of their shaykhs, such as Suleymān al-‘Aṭāwina and Jabr ibn Sālim who are remembered as examples of the Bedouin virtues of prowess and hospitality: their present head, Shaykh ‘Alī ibn ‘Aṭīya, has a reputation for wisdom and piety, and is consulted in their difficulties by many of the Beersheba Bedouins. He married a townswoman and, under the Turks, he was held in great honour and served on official bodies in his own district, and on the General Council in Jerusalem. He is one of the few Bedouins who have sent their children to school, and several of his sons have become Effendis.

The Belī

The name Belī is well known in the annals of ancient and modern Arabia: In Beersheba district there are but 300 of them, and they are included by our author amongst the Tiyāha, presumably because formerly they were under the shaykhship of Ibn ʻAṭīya, and later of the Hazīl. Nowadays they have a shaykh of their own. Their brand is the *miḥjan*.

It was one the Ḥījāz Belī, Ḥāmid ibn Rifāda, who a few years ago led an unsuccessful rebellion against Ibn Saʻūd, in the course of which he lost his life. Refugees of the tribe in a miserable state of poverty came to Beersheba as a result of these events.

The Shallāliyīn

ʻĀrif Effendi was unable to obtain any reliable information about their history either in oral tradition or in books, except for the statement that they are descended from the biblical Abraham. The name is derived from a tribal ancestor known as Abū Shalla; one of their sections, the Saʻādna, appear to be connected with a section of the Jubārāt which bears the same name. Formerly they were under Ibn ʻAṭīya but, after the War of ʻAwda and ʻĀmir, they passed under the shaykhship of the ʻAllāmāt; they now have their own shaykh, and they number about 1,000 all told. Their brands are the *bāb*, the *khuṭām*, and the *ladhʻa*.

The Banī ʻUqba

Here again we have a famous tribal name, though it is not easy to say whether there is any connection between this tribe of Beersheba and the Banī ʻUqba of history.

The tribesmen relate that their ancestor was ʻUqba ibn ʻĀmir al-Juhanī who carried the Prophet's standard, and who at the Prophet's command was served with milk before the other leaders of the army: there is, however, another tradition which connects the tribe with ʻUqba ibn Nāfiʻ, the famous leader of armies in the time of the early conquests of Islam. [It may be suggested that these traditions are of no historical value: and that they are only suggested by the identity of name which, of course, may be quite fortuitous.]

The Banī ʻUqba with whom we are here concerned have a high reputation as expounders of Bedouin law, and they are often consulted in matters affecting women and personal honour (*bayāḍ al-wajh*). When one of the Banī 'Uqba is present, though he be a mere youth, he is always served with coffee before all others.

They have a story of a fratricidal war in the ancient days which runs as follows :

Once upon a time there was a year of such plenty in Gaza that all the tribes flocked thither to partake of the rich grazing, and amongst them the Banī 'Uqba. But this displeased the Jubārāt who then occupied the *Dār* ; yet since their numbers were small and they could not resist by force of arms, their leader al-Wiḥaydī thought of a stratagem. There was a beautiful maiden of the Muṭayrīya al-Duwaysh, who lived with the tribe as a *ṭanība*, and her he sent to Dāwūd of the Banī 'Uqba bidding her to put herself under his protection : for he knew that Sa'ūd ibn Mas'ūd, the cousin of Dawūd, was a lover of beautiful women, and he foresaw that the presence of the Muṭayrīya girl would sow discord between the cousins : and so it came to pass. The tribe were watering in the Wādī al-'Araba, and Sa'ūd was playing at *manqala* with one of his cousin's slaves, when the girl appeared unveiled and went down to the watering-place. Sa'ūd was struck by her beauty, but the slave warned him against the consequences that might befall, if he were to covet the girl. The dialogue between Sa'ūd and the slave is recorded in verse (a sure indication of the legendary nature of the narrative) but Sa'ūd would not listen to counsel : he drew his sword and struck off the slave's head, and forthwith Dawūd summoned his followers to battle, and thus the fratricidal war began which al-Wiḥeydī had desired. It was fought with great ferocity, and but few survived on either side. The remnants scattered all over the country, some in Beersheba, some in the Ḥijāz, some in Kerak, some in the hills of Nablūs.

The Banī 'Uqba, who live in Beersheba district at the present day, state that they are descended from one of these survivors, a man of Dawūd's party named 'Alī ibn Najdī, who attached himself to al-Wiḥeydī's Jubārāt and married amongst them.—They are divided into three sub-sections, one of which (it is interesting to note) is named Quraysh. Their brand is the *dabbūs*.

The Qadīrāt

A numerous tribe, divided into four sub-sections: Jafāfila, Maṭāriqīya, Ḥarīzāt, and ʻUthmān. According to Alois Musil (Arabia Petraea) only the last-named are of genuine Tiyāha stock, being descendants of ʻUthmān a son of Rabāb. There is a tradition which credits the Qadīrāt with having the blood of the Crusaders in their veins, and according to ʻĀrif Bey their physical appearance suggests that the tradition is well founded: it is also worthy of note that the sign of the cross is one of their camel-brands, and that a family or sept of the tribe bears the name Ṣalaba.

In Sinai there is a well known as ʻAyn al-Qadīrāt discovered, so the story goes, by a goat which had strayed from the flocks of the ancestor of the Ḥarīzāt, and this at one time was the head-quarters of the tribe. This ancestor, having slain a man, was exiled from his tribe for a space of ten years, ten months, ten weeks, ten days, and ten hours, and during his wanderings as an outlaw he joined forces with a man of the Maṭāriqīya: at ʻAyn al-Qadīrāt they came in contact with the Tiyāha, and chose one of the Banī ʻAṭīya as their shaykh.

The Qadīrāt number some 4,000 souls: during the early days of the British occupation a number of them, under Ibrāhīm ibn Salāma, committed numerous acts of lawlessness, and they lived as outlaws until they made their peace with the government.

One of their brands, as has been said is the cross (*ṣalīb*); they also use the *muṭraq* (some sections a single *muṭraq*, and others two); the Qadīrāt al-Ṣāniʻ do not use the *ṣalīb*, their brand being two *muṭraqs* on the neck and a single *muṭraq* on the temple.

The Dhullām

The tribal ancestor, so the story goes, was a man of the Belī in the Ḥijāz: a son of his having been slain by a fellow-tribesman he was awarded forty camels as bloodwit, but the slayer could produce only thirty-nine. Incensed on account of the missing camel he shot the debtor dead, for which reason he was called Dhālim, the wrong-doer, and he was forced to flee from his tribe.

He served as herdsman to a man of Belī named al-Lahīb, and the two together migrated to al-Ḥafīr where Dhālim married a girl of al-Lahīb's folk. They had three sons, from whom all the Dhullām are sprung: Mahnā, ancestor of the Mahāyina, who are the people of Abū Ṣubayḥ and Abū Qireynāt; Janbūb, ancestor of the Janābīb; and Rā'ī al-Hameysa, ancestor of the Hameysāt, also known as the Dhullām of Abū Rabī'a. The grave of Mahnā, in the Wādī al-Ḥafīr is still a place of pilgrimage.

The Janābīb remained in the Wādī al-Ḥafīr, but the other sections migrated and allied themselves to the Tiyāha, on whose side they fought against the Tarābīn. In one of their battles the Dhullām lost eighty horsemen, and soon after this disastrous fight the tribes made peace.

Later the Dhullām were involved in fratricidal strife, which broke out amongst the different sections of the Tiyāha, and in the War of 'Awda and 'Āmir they fought on the side of the first-named. Then there was a war between the Dhullām and the people of Yaṭṭa, on which a Sharārī bard composed verses quoted by 'Ārif Bey, in which he celebrated the prowess and hospitality of the Dhullām.

The Dhullām number about 2,000, and their brand consists of four or five *maṭāriq*.

The Ramādīn

According to their tradition the Ramādīn are the descendants of Ramaḍān, a man of the Shammar tribe, who came to the district together with his brother Artīm, the ancestor of the Riteymāt, who are now counted a section of the Jubārāt. They allege that they arrived before any of the other tribes of the area, and that they dominated the land " from sea to sea ; " for there were no other inhabitants except for the Wiḥeydāt and the Ka'ābna who nowadays dwell at Jebel al-Khalīl. The two brothers eventually quarrelled on account of a woman, and the quarrel led to war and to the separation of the tribes.

The Ramādīn, therefore, are not of Tiyāha origin: their brand is three *maṭāriq*.—Although at one time they were united under a single chief, they are now divided into two sections, the Musāmira and the Shu'ūr, each under a separate shaykh. They number about 500, and according to the author, are conspicuous for their hospitality and bold spirit: they rendered particularly good service in the anti-locust campaign of 1930.

The Qireynāwīya

These people do not rank as an independent tribe or section, being scattered amongst other tribes of the Beersheba area: they number about 500 souls. The name is derived from Qireyn, a village in the Fāqūs district in Egypt: according to tradition they originally came from a place called al-Ṣafrā in the Ḥijāz whence they migrated to Qireyn; they still visit the tomb of their ancestor, Seyyid Ṣaliḥ al-Asfar al-Balāsī, at Fāqūs, and their Egyptian fellow-tribesmen maintain close touch with them, and even contribute to the payment of bloodwit. Shaykh Aḥmad al-Seyyid Farḥān, the Fāqūs wakīl of the organization of Ṣūfī Brotherhoods, belongs to this tribe.

The date of their arrival in the Beersheba area is unknown: they assert, however, that it was before the "War of 'Awda and 'Āmir."

Their brand originally was the *hilāl*, placed on the right side of the neck, and the *shāhid* on the right temple: nowadays, however, they substitute a *mughayzil* for the *hilāl*, whilst retaining the *shāhid*.

The Qaṭāṭiwa

Though not of Tiyāha origin they have lived with them a long time. Their brand is the *hilāl*, placed on the right side of the neck, and some of them use the *ṣalīb*; the section attached to the Tiyāha own the fertile land between Khirbat al-Jundī and Baṭīḥa: another section, which has attached itself to the 'Azāzma, live to the west of Beersheba. The name is derived from Qaṭīya in the Sinai Peninsula, whither they are said to have migrated from the Ḥijāz, ejecting the 'Aṭīyāt and the Na'ām; later famine forced them to leave Qaṭīya for their present habitations. According to their own statement they came to the district together with the rest of the Tiyāha, but the author is inclined to date their arrival about a hundred years ago, on the ground that their shaykhs at the present day still preserve the tradition of their tribal wars at Qaṭīya in the form in which they heard it from their fathers who were themselves present during those fights.

The Qalāzīn

The author omits an account of their history, except for stating that he believes them to be of Jubārāt descent: only a small section, numbering about 200, live with the Tiyāha. Their brand, the *miḥjan*, is identical with that of the Jubārāt section which bears the same name.

The Badīnāt

This small section (they number about 350) is of genuine Tiyāha descent, and their history is closely interwoven with that of the true Tiyāha. Their brands are three *muṭraqs* (the middle one being shorter than the other two), and the *khuṭām*, which is the original brand of the Tiyāha.

REVIEWS AND NOTICES

Bombyliidae of Palestine. By E. E. AUSTIN, D.S.O. Trustees of the British Museum (Natural History), 1937. 15*s*.

Many of the readers of our QUARTERLY, though mainly interested in archaeology, have found time to observe and love the abundant life of Palestine in springtime. Among the varied profusion of flowers they may have seen " bee flies " (Bombyliidae), visiting blossoms or basking on the earth. Many of these flies are easily known by their rounded hairy bodies and long straight proboscis. In colour some are pale sandy or silvery, and one must admit a strong resemblance to the terrain, whether or not one allows the colour to be " protective," but some of the species, curiously and inexplicably, are black or nearly so. These flies, so delightful in appearance, have most interesting life histories. It is believed that all are parasitic, some on egg masses of grasshoppers, others upon insects of other types.

Major E. E. Austin, formerly Keeper of the Department of Entomology in the Natural History Museum in Kensington, himself collected much of his material in Palestine in 1917–18. Supplementing it with various small collections, and with what is recorded by others, he here gives an account of 128 species of Bombyliidae now known to occur in Palestine. Forty-six of these species are described as new in the present work ; as to the rest, the reader is referred to books and journals where the original descriptions may be found. We venture to suggest that this hardly meets the needs of the worker in the Mediterranean, who has no library, and who would have welcomed short diagnostic descriptions of every species.

It need hardly be said that a book written by Austin, illustrated by Terzi, and published by the Trustees of the British Museum, is in every respect an admirable and careful piece of work.

P.A.B.

The Committee have to acknowledge with thanks the following:

Annals of Archaeology and Anthropology, the University of Liverpool. December, 1936, and June, 1937. Jericho, City and Necropolis, by J. Garstang, I. Ben-Dor and G. M. Fitzgerald. Explorations in Cilicia, by J. Garstang.

The Antiquaries Journal, July and October, 1937.

The Expository Times, October–December, 1937. Recent Biblical Archaeology, by J. W. Jack.

Great Britain and the East, October–December, 1937.

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Bulletin of the American Schools of Oriental Research, October, 1937. Western Asia in the Twentieth Century, B.C. The Archives of Mari, by W. F. Albright.

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Zeitschrift für die alttestamentliche Wissenschaft, bd. 14, hft. 1–2. Suggestions and Objections, by G. R. Driver.

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Bible Lands, October, 1937.

Bulletin of the Jewish Palestine Exploration Society, July, 1937.

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Annual Bibliography of Islamic Art and Archaeology, ed. L. A. Mayer. Vol. 1935.

The Pottery of Palestine from the Earliest Times to the End of the Early Bronze Age, by G. E. Wright.

Inscriptions and Sculptures from Palmyra, I, by H. Ingholt.

The Library of the British School of Archaeology in Jerusalem. The Director reports the following further additions during 1937 :

Der Alte Orient : Title-pages for Vols. 20, 28 and 30. Vol. 35, Nos. 1 and 2.
Annual of the British School at Athens : Vol. 34.
Antiquity : Vol. 11, Nos. 41 and 42.
British Museum Quarterly : Vol. 11, Nos. 1 and 2, and Index to Vols. 6–10.
Bulletin of the American Institute for Iranian (formerly Persian) *Art and Archaeology :* Vol. 4, No. 4.
Bulletin of the American Schools of Oriental Research : Nos. 64, 65 and 66.
Bulletin of the American School of Prehistoric Research : No. 13.
Bulletin of the Jewish Palestine Exploration Society : Vol. 4, Nos. 1, 2 and 3.
Bulletin of the John Rylands Library : Vol. 21, No. 1.
Bulletin of the Metropolitan Museum of Art : Vol. 31, No. 12, Vol. 32, No. 1 (Sections 1 and 2), and Nos. 2, 3, 4 and 5.
General Monthly Bulletin of Current Statistics of Palestine : Vol. 1 (1936), Nos. 1–6. Vol. 2 (1937), Nos. 1–5.
Göttingische Gelehrte Anzeigen : Vol. 198, Nos. 6–12.
Iraq : Vol. 4, No. 1.
Journal of Egyptian Archaeology : Vol. 22.
Journal of Hellenic Studies : Vol. 56, No. 2.
Journal of the Palestine Oriental Society: Vol. 16, No. 4. Vol. 17, No. 1.
Journal of Roman Studies : Vol. 26, No. 2. Vol. 27, No. 1.
Journal of the Royal Asiatic Society : 1937, Nos. 1 and 2.
Kirjath Sepher : Vol. 13, No. 4. Vol. 14, No. 1.
Liverpool Annals of Archaeology and Anthropology : Vol. 23, with 2 supplements. Vol. 24, Nos. 1–2, with supplement.
Palestine Exploration Fund Quarterly Statement : April, 1936.
Palestine Exploration Quarterly: 1937, January and April.
Quarterly of the Department of Antiquities in Palestine : Vol. 6, No. 2.
Revue Biblique : Vol. 46, Nos. 1 and 2.
Syria : Vol. 17, Nos. 3 and 4.
Syro-Egypt : 1937, No. 1.
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TRANSLITERATION OF HEBREW AND ARABIC CONSONANTS

HEBREW

HEBREW	ENGLISH		HEBREW	ENGLISH	
א	’		כ	k̲h̲	
בּ	b		ל	l	
ב	b̲h̲		מ	m	
גּ	g		נ	n	
ג	g̲h̲		ס	s	
דּ	d		ע	‘	
ד	d̲h̲		פּ	p	
ה	h		פ	f	
ו	v, w		צ	z̲	
ז	z		ק	k̲	
ח	h̲		ר	r	
ט	t̲		שׁ	s̲h̲	
י	y		שׂ	s̲	
כּ	k		תּ	t	
			ת	t̲h̲	

ARABIC

ARABIC	ENGLISH		ARABIC	ENGLISH	
ا	’		ض	d̲	
ب	b		ط	t̲	
ت	t		ظ	t̲z̲	
ث	t̲h̲		ع	‘	
ج	g	or j in Syrian Arabic.	غ	g̲h̲	
ح	h̲		ف	f	
خ	k̲h̲		ق	k̲	
د	d		ك	k	
ذ	d̲h̲		ل	l	
ر	r		م	m	
ز	z		ن	n	
س	s		ه	h	
ش	s̲h̲		و	w	
ص	z̲		ي	y	

Long vowels marked thus :—ā, ē, ī, ō, ū

THE PALESTINE EXPLORATION FUND

NOTES AND NEWS

We have to record with profound sorrow the lamentable event which has cut short the career of one of the best-known of British field-archaeologists. By the shocking murder of Mr. J. L. Starkey at the hands of a band of Arabs near Hebron, on 10th January, many of us have lost a valued friend, and Palestinian Archaeology has suffered a grievous loss. Those who have visited the exhibitions at the Rooms of the Palestine Exploration Fund and the Wellcome Museum of the results of the Lachish excavations will retain a vivid memory of the Director's boundless energy and enthusiasm, his organizing skill, his sincerity and kindness of heart, and his mastery of every detail connected with the conduct of an archaeological expedition. An appreciation of his work and character by one of his closest associates will be found on p. 80 of this issue.

Tribute to the memory of the late Mr. J. L. Starkey was paid on the occasion of a lecture in the Rooms of the Fund on 26th January by Sir Charles Close, who said:

"We have all of us been greatly shocked and distressed by the news that Mr. J. L. Starkey was brutally murdered in Palestine on the 10th of this month. He was well known to many of us, and was a good friend of the Fund. He had recently joined our Executive Committee and we had hoped much from his help and good will. He was a most experienced and capable archaeologist and an excellent administrator, who always maintained very friendly relations with his labourers and with the people of the neighbouring villages. It is in no conventional sense that we say that his loss to science is a very severe one."

He was buried in the cemetery on Mount Zion, on the 11th, the High Commissioner, other officials, and representatives of all communities attending the funeral.

The Fund was represented at the memorial service in London.

Sir Harold MacMichael is the first High Commissioner to Palestine who has spent the greater part of his life in the Nearer East, the first who will be able to talk fluently in their own tongue with the majority of the inhabitants of Palestine and Transjordan. Sir Harold entered the service of the Sudan Government in 1905 and was holding the office of Civil Secretary to the Government—a post which corresponds with the Chief Secretaryship in most Crown Colonies—when he was appointed Governor of Tanganyika a few years ago. He is not only a distinguished administrator: the Cambridge University Press published a *History of the Arabs in the Sudan* in two volumes from his pen, and he is the author of other books on the Arabs of Kordofan, and Arab Camel Marks, besides several articles in scientific journals. He carries with him the best wishes of a large circle of friends.

In a lecture given at the Royal College of Surgeons, on 15th February, Sir Arthur Keith discussed the results of the discoveries in the Carmel caves, accounts of which have appeared in this journal. According to Sir Arthur Keith the deposits in the caves represent a period of human habitation lasting from a point of time before the onset of the last glaciation to about the time of Abraham, that is, a period of at least 100,000 years. The actual work of restoring the skeletons has been a triumph of skill and patience. The skeletal remains were found imbedded in breccia as hard as cement, and Mr. McCown was obliged to cut out the bone-bearing breccia in blocks weighing a ton or more, and have them conveyed to London. The rougher work of extraction was done at the museum of the Royal College of Surgeons, but the long and arduous task of restoration, occupying four years, was done by Sir Arthur Keith and Mr. McCown at the Buckston Browne Research Farm, Downe.

One of the most surprising things about this fossil group of early Palestinians was its wide range of structural variation. At one end of the series was a woman who showed close affinities to the very primitive Neanderthal type of Europe; at the other end was a man who might be a crude form of an early European. Sir Arthur Keith said that he did not believe we had reached the homeland of Europeans in Palestine, but that, as research was carried further into Western Asia, we should find the fossil remains of men who have still less of the Neanderthalians in them and more of the modern than is the case at Mount Carmel.

Another surprising discovery was what Sir Arthur Keith describes as the earliest " war-wound " known to surgeons. When the hip-joint of one of the men was cleared of limestone breccia it was found to be shivered. A perforation was found at the centre of the injury, filled in with cave earth. When the earth was removed from the perforation of the femur and pelvis and a cast taken of it, they had the image of a four-sided spear head. It was not known that such weapons had been invented at so early a date ; they believed that the only fighting weapons possessed by men at that time were stone clubs. A spear to penetrate the whole thickness of the hip-joint of a large-framed man and to enter the pelvis, as this weapon did, must have been finely tempered and driven with exceeding force. It is, however, somewhat startling to find the suggestion of the use of metal-weapons as such a remote period, and it is not clear that such a wound could not have been caused by a flint weapon.

The Neilson Expedition from Liverpool University, under the leadership of Professor Garstang, have made a promising beginning of excavation near Mersina, on the Cilician coast, where they have discovered a double-walled fortress of early Imperial Hittite style and date. It is thought to mark the site of a frontier post between the rival southern kingdom of Arzawa and the allied State of Kizzuwadna (which seems to have included Tarsus) during the sixteenth or fifteenth century B.C., when, according to the records, the latter State " formed part of the realm of Hatti."

Soundings have disclosed no fewer than nineteen successive occupation-levels. The bottom layer rests upon the destroyed remains of an older society which seems to have been linked culturally with the predynastic civilization of Sumer and Egypt. Further excavations on the site are planned, and results of great importance are to be expected.

It is with profound regret that we have just received news of the death of the Very Reverend Father Marie Joseph Lagrange which took place in France on the 10th of March in the Convent of the Dominicans at Saint Maximin La Sainte.

Père Lagrange was the founder of the French School, l'École Biblique et Archéologique de Jérusalem, to give its full designation, and for very many years his tall figure, a presence as gracious as it was commanding, has been familiar to all who have frequented that institution. To a wider circle he is well known by reason of his work in the fields of comparative religion and biblical criticism and by the long series of articles which he contributed to the pages of the *Revue Biblique* of which, too, he was the founder. Père Lagrange was in the 84th year of his age and the 58th of his religious profession.

The full report of Sir Leonard Woolley's excavations at Tal Atchana, in 1937, has now been published in *The Antiquaries Journal* of January in this year, and is of the excellence and accuracy which we have learned to expect from Sir Leonard's reports. The mound lies in the Amk plain, a little distance to the north of the Orontes. The general significance of the first year's results lies in the light thrown on the mingling of Aegean, Hittite and Hurrian cultural elements in the civilization of north-west Syria about the middle of the second millennium B.C. Some cuneiform tablets were discovered, and are to be published by Mr. Sidney Smith in *Iraq* shortly. The details of the civilization of north-west Syria provided by the French excavations at Ras Shamra are gradually being filled in by the progress of further discovery.

One of the most important discussions of the bearing of the new Legend of Keret on the historical background of the Patriarchal narratives of Genesis is contained in Vol. ccxxix, part 1, of the *Journal Asiatique*, by Raymond Weill, and provides a valuable adjunct to Dussaud's discussion in his recent book, *Les Découvertes de Ras Shamra* (*Ugarit*) *et l'Ancien Testament*. A necessary reminder of the caution with which certain of the conclusions of the French scholars must be received is given in Eissfeldt's review of Dussaud's book in OLZ for December, 1937. It will be a long time before the full bearing of the Ras Shamra tablets can be fully estimated and placed in a correct historical perspective.

Professor Albright reminds us " that Palestinian archaeology is now yielding clear-cut data, so that no student of Israel's history can longer afford to neglect what is being done by archaeologists." A proof that such a reminder is still necessary is afforded by the fact that at a recent meeting of a group of persons mainly concerned with matters relating to the study of the Bible, most of the members were unaware that the languages and scripts of the various racial groups known as " Hittites " had been deciphered and translated, and that " Hittite " laws, treaties, history, and mythology, having an important bearing on the Old Testament, were now available to students.

On pp. 12, 13 of the PALESTINE EXPLORATION QUARTERLY, 1937, a prize was offered for an essay on some archaeological or ethnographical subject (not mainly linguistic or literary) connected with Prehistoric or Pharaonic Egypt.

The Committee reports that it is very gratified at the response, the following ten essays having been sent in. They came from England, America, France, Egypt, and the Sudan, and are listed in the order in which they were received :

1. The Lamps of Ancient Egypt.
2. Some New Light on the Beginnings of Egyptian Civilization.
3. The Labyrinth of Hawara.
4. Ancient Egyptian Agriculture.
5. The Liver's Significance to the Egyptians, Minoans, and Babylonians.
6. The Rock-Pictures of Lower Nubia.
7. Beekeeping in Ancient Egypt.
8. Prehistoric Steatopygous Figures from Egypt and Elsewhere.
9. The " First Intermediate Period " of Egyptian History.
10. An Unusual Insignia.

The standard was high, and more than one essay was of outstanding merit. One competitor had not noted the phrase in the advertisement " not mainly linguistic or literary." Several excellent papers were unfortunately too limited in scope to compete with the four more important ones. After careful consideration of the subject matter, outlook displayed, importance of the results obtained, &c., the prize was unanimously awarded to Essay No. 9, *The " First Intermediate Period " of Egyptian History*, which proves to be the work of Mr. Theodore Burton Brown. It is hoped the author may be able to publish what is clearly a valuable contribution to our knowledge of early movements in the Near East.

K. DE B. CODRINGTON, M. A. MURRAY, G. A. WAINWRIGHT.

JAMES LESLIE STARKEY

An Appreciation

On 10th January, J. L. Starkey left the camphouse at Duweir to attend the opening of the Palestine Archaeological Museum in Jerusalem. He went off cheerfully and the encounter with armed bandits just outside Hebron was so sudden that he cannot have realized what was happening. For members of the Expedition who are continuing his work in surroundings which are impregnated with his presence it is difficult to believe that he has gone. His plans continue as a guide, his personality remains as an abiding influence.

James Leslie Starkey was born in London in 1895. He was a delicate child and had not much companionship of his own age. His mind developed along its own lines, unfettered by the conventionality of too rigid an education, and when he started work about his fifteenth year he acquired additional self-reliance. It was about then that his interest in antiquities was aroused by a book of engravings (I believe it was Layard's *Nineveh*) which he asked for as a birthday present, and by his work in an antique dealer's, where he was continually handling fine things and speculating as to their origin.

As it happened, the posts he held up to the War all added something to his equipment as a future archaeologist, while every spare moment was spent in London galleries and in the reading-room of the British Museum.

During the War he joined the Royal Naval Air Service ; for some months he was posted in a lighthouse off the English coast, and in those lonely hours he laid the foundations of his archaeological knowledge by reading text books, which he had sent out to him. He read slowly, but his memory was accurate and retentive.

Soon after demobilization J. L. Starkey began to attend evening classes at University College, and there he got in touch with Professor Petrie and studied hieroglyphs under Dr. M. A. Murray. I first met him in July, 1922, when we

Photo: *Planet News Ltd.*

J. L. STARKEY

were both demonstrating at the Annual Exhibition of the British School of Archaeology in Egypt, and in his kindness to me then, was rooted an enduring friendship. In the autumn of that year he abandoned a promising business career to devote himself to archaeology.

He spent two seasons in the Qau-Badari district in Egypt, working with Professor Petrie and Mr. Guy Brunton—seasons that were full of vivid experience.

It was he who discovered the papyrus manuscript which proved to be one of the earliest known copies of the Gospel of St. John.

In 1924 he was appointed Field Director of the Michigan University Expedition to Kom Washim, and that year he married Marjorie Rice. He and his wife spent two happy and successful seasons in the Fayum, and while he was there he took the keenest interest in the problem of Lake Moeris, to which he contributed shrewd observations.

Two years later he rejoined the British School and accompanied Sir Flinders Petrie when he began work at Tell Jemmeh in Palestine, and as the Professor's first assistant he found himself faced with many new problems in very different surroundings. In Egypt the labourers were mostly skilled in archaeological field work, in Palestine he found Bedu Arabs with no previous experience of any regular employment. He soon created a band of orderly workers taking pride in their tasks. In 1927 he was in charge of the British School of Egyptian Archaeology's excavations at Tell el Fara and it was there I first had the pleasure of working for him. The two following seasons were spent at this Tell, and the investigations he made then of the Wadi Ghuzzeh flint sites yielded valuable results which have still to be followed up.

When a new site was to be selected for the British School's excavations, he advocated the choice of Tell el Ajjul and in the autumn of 1929 he built the camphouse there for Sir Flinders and revived the wartime canalization of the Wadi Ghuzzeh, which effectively removed the risk of malaria. In the seasons that have followed at Ajjul, the reliability of his judgment has been amply shown.

When he approached Sir Henry Wellcome with a view to forming an Anglo-American Expedition in conjunction with

Mr. H. Dunscombe Colt, he suggested alternative sites—Tell el Areini (Gath ?) in the plain, and Tell ed Duweir (Lachish ?) in the foothills. With the co-operation of Sir Charles Marston and Sir Robert Mond an Expedition was sent out in the autumn of 1932, and it was a tribute to his abilities that these gentlemen chose the much greater task—both historically and financially—of excavations at Tell ed Duweir.

The discoveries of the Wellcome Marston Archaeological Research Expedition to the Near East during five years have been recorded in these pages[1] as reports of the lectures he was privileged to give to members of the Palestine Exploration Fund. There is no need to repeat here the additions he has made to our knowledge of ancient Palestine. It was characteristic of his generous nature that his results were always at the disposal of those who wanted information for publication or research. He considered that it was his place as a field archaeologist to provide fresh material for interpretation by specialists ; he served them ungrudgingly, not only in this way but by so creating and stimulating interest among the general public for matters which were often very technical, that their results received full recognition. His power, thought and energy were so wholly in the service of his profession that he could not fail to impress others with his enthusiasm.

It was this singlemindedness and direct purpose which endeared him greatly to his Arab workers. They all feared him and without a certain element of fear there is no admiration in the Arab mind. Yet they could laugh at and with him as he laughed at and with them, and with laughter there is love. Not only the Bedu and Fellah workers who have been in daily contact with him for years, but all the Arabs of south Palestine sincerely mourn him, as they tell stories, which will become legends, of his deeds.

For his staff the loss is irreparable, but the work he had so much at heart remains. It is hoped to make the publication of results at Lachish up to the time of his death the first task, and the continuation of excavations would be a fitting memorial to a far-sighted leader and a dear friend. He planned to include many forms of archaeological research in his organization—of which the Geological Section's work at Bethlehem was the first offshoot. J. L. Starkey's breadth of outlook, his sound judgment, and his ability to see all sides of a question would have made him a leader in whatever walk of life he chose, the study of archaeology is much richer for his choice and suffers greatly by his untimely end.

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[1] See PEFQS, Oct. 1933, Oct. 1934, Oct. 1935, Oct. 1936 ; PEQ, July and Oct. 1937.

OLGA TUFNELL.

February, 1938.

HELENA'S PYRAMIDS

By Lt.-Col. N. P. Clarke

[*Sketches 2 and 3 show the line first reported by Dr. Robinson. I am now satisfied that there is justification for accepting also the more northerly line, which was marked by Williams (amongst others) on the R.E. Survey map of* 1841. *Psephinus should, of course, be sited at the N.W. angle of this Northern line, and not as shown in the sketches, where it is about* 150 *yards south of what I believe to have been its true position.*

I suggest that the two lines of walls formed part of the Psephinus fortress enceinte, and that the many cisterns found in this area, belonged to it.

The present Tower of David was a self-contained fortress, and probably was so when the tower Phasael stood there. Similarly Hippicus is called " a tower." So in his description of Antonia, Josephus, throughout, calls it a tower (Wars v, 5, 8). *It was a fortress. So, I think, was Psephinus.* (Cf. *also Tower of London.*)]

When someone who lays no claim to being an archaeologist, puts forward, for consideration, a new theory on a matter that has always puzzled the experts, he treads on very dangerous ground. For I have read scathing remarks about the " uninformed " daring to speak, where the " informed " are puzzled. It seems to me, however, that such an attitude is absurd. Does not the layman pass Church laws (whether individuals of the Church like them or not) ? And does not the civilian invent new engines of war (for who ever heard of a soldier inventing anything ?). And does not the government inspector frequently tell the man on the spot what he has got to do, and how ; and what he mustn't do, and why ; although the man on the spot has forgotten more about his subject than the government inspector is ever likely to know ?

It would, of course, be ridiculous to entrust the scientific excavation of an important site to a man who had never seen a " dig." But if an archaeological report on a historical matter makes such difficult reading, that the ordinary mortal is not able to understand it sufficiently, to comment on it, then there must be something wrong with the report. I am not referring here to a purely technical matter, such as whether a certain scarab was made in Egypt or Syria. But on matters of ordinary historical interest, in which the decision can only be reached by bringing into review, historical, traditional or military questions, it seems to me that the soldier with no archaeological knowledge, may, at times, form just as sensible an opinion as the archaeologist who is without such military experience. For if this is not the case, we might as well hold that no judge, in a case dealing with the actions of a crook city financier, is justified in summing up the evidence, and putting his views to the jury, unless he can show that he has been a crook city financier himself. Which, as Euclid used to say (and I suppose still does), is absurd.

It is, therefore, only because I hold such unorthodox views that I dare to encroach on sacred soil. And with this apologia, I should much like to put forward a theory with regard to the identification of the site of the Monuments of Helena outside Jerusalem.

Josephus

Our primary source is Josephus. He tells us (Ant. xx, ii, iii, iv) that Helena was the wife of King Monobazus, of Adiabene, and the mother of two sons Izates and Monobazus. On her husband's death, Monobazus, the elder, became king, and Izates who had kept the kingdom for him, during a "troublous" period, later received another kingdom. Helena had meanwhile become a proselyte to Judaism, as had her son Izates also, and went to live in Jerusalem. (This was about A.D. 46.) There she endeared herself to the people, particularly by her charity during a famine. Shortly afterwards (about A.D. 50) her son Izates died. Helena at once left Jerusalem for Adiabene where she died soon afterwards.

Josephus concludes (Ant. xx, iv, 3.) "Monobazus sent her bones, as well as those of Izates, his brother, to Jerusalem, and gave order that they should be buried at the pyramids which their mother had erected; they were three in number, and distant *more than three furlongs from the city Jerusalem.*"

My next reference is Josephus (Wars v, 4, 2) where in describing the third wall of Jerusalem he writes: "The beginning of the third wall was at the tower Hippicus, whence it reached as far as the north quarter of the city and the tower Psephinus; and then was so far extended till it came over against the monuments of Helena, which Helena was Queen of Adiabene, the daughter of Izates; it then further extended to a great length[1], and passed by the Sepulchral Caverns of the Kings, and bent again at the tower at the corner," &c.

The above is Whiston's translation. Thackeray's translation says "and *descended past the monuments of Helena*."

There follow two tactical references during the ensuing fighting.

Jos. Wars v, 2 2.

Titus made a preliminary personal reconnaissance of the walls. He was escorted by cavalry. Two horsemen preceded him, "at some distance"; the remainder were apparently some distance in rear, except a few with him. The account says:

"Now, so long as he rode along the strait road which led to the wall of the city, nobody appeared out of the gates; but when he went out of that road and declined [inclined ?] towards the tower Psephinus, and led the band of horsemen obliquely, an immense number of the Jews leapt out suddenly at the towers called the *Women's Towers*, through that gate which was *over against the Monuments of Helena*, and intercepted his horse; and standing directly opposite to those that still ran along the road, hindered them from joining those that had declined out of it. They intercepted Titus also with a few others. Now it was impossible for him to go forward, because all the places had trenches dug in them from the wall, to preserve the gardens round about, and were full of gardens obliquely situated, and of many hedges."

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[1] Whilst writing the above paper, I was only able to consult Thackeray's translation by one or two borrowings, whilst having Whiston always by me. Publication has, unavoidably, been delayed. In the meanwhile, I have had further opportunities of studying Thackeray. His translation of the course of the third wall includes: "And then descending opposite the monuments of Helena . . . and proceeding past the royal caverns it bent round, &c." This is, I believe, the more literal translation of the two. It does not mention the great length between the monuments and royal caverns. It is of interest to note, however, that Josephus' successive landmarks, as far as we can judge their position, are never close together. In this case the royal caverns are the next landmark, east of the monuments.

I have stressed the "great" length mentioned by Whiston. Since the article is already in print, it will be inconvenient to alter this. I therefore leave it, with this explanation, that I no longer stress any argument on this "*great*" length, and regret any inconvenience to readers for my blunder.

Titus got back, though his two advanced men were killed.

The final reference deals with the incident of the stratagem planned by the Jews against the Romans, whereby they decoyed some Romans into the space between the towers of the gate called the Women's Towers.

Josephus concludes by saying (Wars v, 3, 3): "The Jews pursued them as they retired and followed them and *threw darts at them as far as the monuments of Helena.*"

The above are the only references I have been able to find which undoubtedly refer to the Pyramids of Helena.

Pausanias, one hundred years later (c. 170 A.D.), referred to "*the tomb of Helena.*" His remarks are described by Williams (The Holy City I, supp. p. 86, from whom all the following references are taken), as being "utterly vague and indefinite."

Eusebius, a hundred and fifty years later (c. 330 A.D.), refers to "*Monumental Pillars*" in this connection.

Jerome (c. 430 A.D.) refers to the "*Mausoleum of Helena,*" passed by S. Paula on her approach to Jerusalem. But as she apparently left the main road in order to visit other places we don't know what road she was on when she passed them.

Later still, Moses Choronensis, an Armenian, wrote about a "*remarkable monument*" at the gates of Jerusalem. He does not name the gate, nor give any indication of its position, so we are not carried much further.

If these four later references were intended to describe three pyramids, it is difficult to understand why not one of the writers did not say so. The identification is so unsatisfactory that we are, in my opinion, justified in doubting whether any of them saw a pyramid at all.

On the other hand some undoubtedly referred to the place where tradition, from second to fifth centuries, said her body was then buried.

Modern authorities are unable to come to any agreement as to the position of these pyramids. The consensus of opinion places them at the Tombs of the Kings.

Robinson, De Saulcy, Merrill, Conder, and Paton place them there. Schultz favours the Tombs of the Martyrs, and I understand from Canon Hanauer that he prefers a site to the east or south-east of the Tombs. Williams inclines to the view that they were on the Nebi Samwil Road, three stadia from the outer wall. Sir Charles Wilson places them possibly either at Conder's " Knoll " north of the Damascus Gate, or at the junction of the Nablus and Saladin roads (which, incidentally, is in the line of wall discovered in 1925).

There is, therefore, no agreement as to the correct site. De Saulcy in 1865 investigated the Tombs of the Kings site and found an unopened sarcophagus, which contained a body that crumbled on exposure to the air. Conder, in describing it, says the inscription on the sarcophagus is of two lines each containing eight letters of Aramaic or Palmyrene script. He says that two of the words mean " Helena the Queen," and that De Saulcy was in error in reading them as Sabar or Saban.

The latter names, translated as Sarah, are, I believe, explained by the custom of the Jews as giving the name of Sarah to a woman convert to Judaism ; as was Queen Helena.

Père Vincent says that the later finding of the word Helena is suspect. He thinks the body to have been that of a late Asmonean queen.

Grounds in favour

The main grounds in favour of the Tomb of the Kings are as follows: (Wilson—" Golgotha and the Holy Sepulchre.")

(1) They are worthy of being described as kingly sepulchres.

(2) Anciently they may have included a monumental pillar—or pyramids—on a platform, remains of which exist on their south side.

(3) They are on the left of the Nablus road, on approaching Jerusalem.

(4) The finding of the sarcophagus.

Objections

My objection is that it is quite impossible to harmonize this site with the allusions by Josephus. For if this is correct, Josephus is wrong, not only in describing as pyramids, what later writers call a " tomb," " monumental pillars," " a mausoleum " and " a remarkable monument," but also, which is far more important, in his measurement from the city (which must have been well known), and in his description of the two tactical episodes during the siege, in which the " monuments " are mentioned.

I do not wish to press the descriptions by later writers too far. They are, however, sufficiently vague either in favour or against any particular site, to warrant us in saying that they do not help.

But the distance—about four and a half stadia in a bee-line from the Damascus Gate by one road, and nearly that distance from Herod's Gate by the other road—presupposes that had Josephus referred to the Tombs of the Kings he would have said " over 4 stadia " and not " over 3."

It was the force of this objection that prevented Sir C. Wilson from subscribing to what I may call the popular view. (*Golgotha and the Holy Sepulchre*, p. 140.)

If Josephus took his measurements from the outer wall of 1925—the Agrippa Wall—the discrepancy is, of course, so great as to become absurd, the distances from wall to tombs being (1) under two stadia, and (2) one and a half stadia from the two roads respectively. But I do not for one moment think he did measure from the Agrippa wall, for reasons given later.

Before we can consider the references during the fighting before the third wall, it is essential to know what wall is meant. I do not intend here to go deeply into the unending controversy regarding the second wall. At the same time, since the matter must be touched on, I will content myself with two reasons—both military—which, to my mind, are amply sufficient, by themselves, to justify my belief that when Josephus was referring to the third wall, he was not thinking of the present line in which the Damascus Gate is situated.

Camp of the Assyrians

(1) When Titus had taken the third wall he pitched his camp within it, at the place called the Camp of the Assyrians, " having seized on all that lay as far as Cedron," but keeping out of range of the Jews' darts.

If he was now within the present line of walls, and if the second wall took any of the traces assigned to it by different investigators, Titus would have been cramped and incapable of lateral movement for his future operations. Sir C. Wilson, debarred from accepting the Northern Agrippa wall—for he lived at a period when the Robinson theory was discredited—was forced to place the camp of the Assyrians inside the present walls.

The objections appear to me insuperable.

No commander-in-chief voluntarily places his head-quarters within range of the hostile artillery. The Romans had engines whose range exceeded 1,200 feet, and however inferior the Jews may have been in this respect, we know they possessed the engines which had belonged to Cestius four years previously. Josephus also tells us that the Jews gradually improved in their use, and Titus would keep out of range of their weapons.

Now before his attack on the Third Wall Titus had his camp " two furlongs " (over 1,200 feet) from Psephinus, and his troops were the same distance from Hippicus.

Why should we assume that, with the Jewish artillery improving, he should now halve that distance ? For that is the implication consequent on placing the Camp of the Assyrians within the present walls.

Sir Charles Wilson allows 250–300 yards as being safe. But this is contrary to the only evidence we have (regarding a safe distance) from Josephus. And a glance at Sketch No. 1 will show that 300 yards from the second wall (assuming it to run in the most retired position suggested by advocates of that theory) brings us, not only up to the Damascus Gate, but even north of the wall, west of that gate. A little patch just inside the present N.W. corner is left free for this camp—certainly not enough for the camp. Point C in the second wall is only 250 yards away from the wall in rear of Titus troops, so that by allowing only fifty yards for the depth of camp (nothing like enough) Titus' camp front would be within 200 yards of the wall he was attacking. Even then the camp would be right back against the wall, and lateral movement from a tactical standpoint impossible.

If we assume the second wall to have run—as some suggest—so that its N.W. corner is at D, the 300 yards range even reaches the N.W. corner of the present walls where Psephinus would—by virtue of this theory—be placed. So that 300 yards is manifestly too much. Even the 250 yards range only allows the Camp of the Assyrians an extent equal to that of a polo ground—scarcely enough, I should say, for the Assyrian host.

Those who want to push Titus into this corner, point out that although Josephus says he had his headquarters in the Camp of the Assyrians, he nowhere suggests that his troops also moved within the wall—except, of course, those in the front line. But this would be contrary to the Roman custom, which ordained that the camp of a commander-in-chief should lie in the centre of the camp, and not in front of it. Having regard to all the circumstances, therefore, I see no grounds to justify us in placing this camp within the present walls. I feel that, had Sir C. Wilson our present knowledge in regard to the discovery of the northern wall, he would not have relegated Titus to such a chaotic position.

(2) The second point has reference to the capture of the second wall. This occurred at " the middle tower of the north part of the wall " (Wars v, 7, 4 ; and first sentence of v, chap. 8).

The adherents of the second wall theory draw their north part of the wall (a) west from Antonia for 300 yards (to C, Sketch No. 1) and then south (this places the Church of the Holy Sepulchre outside the wall); or (b) they draw it 500 yards west (to D) and then south (this places the Church of the Holy Sepulchre inside the wall).

(a) Here the middle tower may be supposed to have been about 150 yards from Antonia, which was 150 feet higher and flanking from the east any attack on that tower.

It is difficult to imagine how appalling such a situation would be for attacking troops. The Jewish artillery from the fortress of Antonia would have ploughed through their ranks with deadly, devastating effect, on their left flank.

And in such a case one cannot imagine Josephus ignoring it. And yet we have no word or hint of any such thing occurring. On the contrary, we have the extraordinary spectacle presented to us, of Titus himself, calmly standing within talking distance of the wall, ordering his ram to cease operations, and indulging in a conversation with a Jew on the tower, called Castor. The incident lasted so long, that Josephus takes a page and a half in describing it. Are we to imagine that all this could take place within 150 yards of a raging Antonia; or that Antonia had also been warned to cease fire, and that Josephus would have said no word about it ?

To my mind, this alone is sufficient evidence that the incident cannot have occurred in the wall we are considering.

As regards the other point (i.e. that the wall extended for 500 yards (to D, Sketch No. 1), and thus the middle tower would have been 250 yards from Antonia), the distance is still within the range of artillery from that high point, though obviously my objection is weakened on this score. But if the wall did extend to this point, we are confronted with our old objection to the Camp of the Assyrians ; for the distance from that point to the wall in rear of this camp, is not, in this case, more than 180 yards.

This would dispose of the idea of the Romans being camped there, and yet out of range.

In view of the above objections I see no justification for placing the Camp of the Assyrians inside the present walls. Consequently I place it outside, and since Josephus tells us that it lay between the second and third walls, the present walls cannot be on the line of the third wall, but must lie south of them.

When, then, Agrippa built, or commenced to build, his wall farther north, the existing wall in his day was the present Damascus Gate wall, however it ran.

Helena's Choice of Site

This leads us to a theoretical consideration as to where Helena would be likely to choose a site for her pyramids.

She did not come to Jerusalem until about A.D. 46, after the death of Agrippa. The foundations therefore of his wall had been laid before her arrival. No further work, as far as we know, was carried out on this wall prior to the defeat of Cestius, and the commencement of the war with Rome in A.D. 66. But the foundations were there, and we can have no doubt that the Jews were extremely annoyed at work on the wall having been stopped. For they were working up to a war with Rome, and Josephus tells us (Wars v, 4, 2) that "the city could in no way have been taken if that wall had been finished in the manner it was begun." This was why the Jews wanted the wall, and why the Romans didn't. And it was during this tense political period that Helena built her pyramids.

It seems to me that in view of the Jewish custom which ordained burials to be outside the walls, and in view of the fact of there being a line of wall, although unfinished, north of the city gates, she would naturally have chosen a site outside this new wall. I do not go so far as to suggest that the law would have obliged her to do so, but it is tolerably clear that she would have given offence to Jewish susceptibilities, with aggressive nationalism in the ascendant, had she decided otherwise. And being a late convert to Judaism, she had to go carefully.

Further, the country just outside the Damascus Gate wall would have been occupied by suburban houses, gardens or vegetable allotments to a greater extent than that nearly half a mile away.

Consequently it seems to me reasonable to deduce that we should expect to find the site of her pyramids outside the northern wall rather than outside the southern.

Point from which Josephus measured

The site, Josephus tells us, was more than three stadia from the city. But no one seems to know from what point he measured. So I will now consider this.

Josephus probably did not know Queen Helena personally. He was about ten years old when she died. But one cannot think he did not know all about the pyramids. After all, the erection of pyramidal sepulchres by a queen is not an everyday occurrence. And we can have no doubt that many people—possibly crowds—used to go out and watch the building, or admire the finished product. The pyramids would therefore become a recognized landmark, and in a district where they were probably unique in their architecture, their distance would have been well known.

The outer—Agrippa—wall was at this time only half built, or less; and as far as defence was concerned, it had no tactical value. Moreover, the sentries, the inspectors of merchandize, and of strangers wishing to enter the city, and the city gates which were closed at sunset, would have been found in the wall in rear of the new foundations.

Consequently it was from this wall—the Damascus Gate wall—that I should assume Josephus to have made his measurements.

Point to which Josephus measured

The position to which he was measuring is one conditioned by the following facts which he gives us.

(1) It was outside the third wall.

(2) It was near a gate in this wall called the Women's Towers.

(3) It was near the road that led to this gate.

(4) It was between the tower Psephinus and the Sepulchral Caverns.

(5) It was the limit of pursuit of Jews who were chasing Roman soldiers from the third wall ; when the whole of the neighbouring front was occupied by clearing parties of Roman troops.

(6) It was over three stadia from the city.

(7) It was on descending ground.

(8) It was " a great length " from the Sepulchral Caverns of the Kings.

Identification No. 1

Josephus when describing the course of the third wall says :

(1) It reached Psephinus.

(2) It further extended and passed the pyramids (Whiston); or, " it descended " past the pyramids (Thackeray).

(3) It then extended a great length.

(4) And passed the Sepulchral Caverns of the Kings.

So we are told that there was a great distance between the locality of the pyramids and that known as the Sepulchral Caverns. And yet I find some writers locating the pyramids and the caverns—whether these are the Tombs of the Kings or Solomon's quarries—at one and the same place. How is it possible that this can be the case ? Josephus is describing the course of a wall—going from point to point—and yet we are told that (2), (3) and (4) refer to one locality.

I have said in (2) that Thackeray's translation renders the meaning as " descended past the monuments." This edition was published in 1928, so should be up to date. Inquiries I made at the British Museum of a Greek scholar confirmed this reading. He said that the " κα " (of καθῆτον, the requisite word) implied " descent," as though the wall was going downhill and passed the pyramids in its descent. Therefore we should locate the pyramids on sloping ground, this ground being east of Psephinus and a " great length " from where the wall passed the Royal or Sepulchral Caverns. Reference to Sketch No. 3 shows that this does describe the lie of the land east of the N.W. corner of the third wall, where was Psephinus. (I am following Dr. Robinson's report and have plotted his measurements on this sketch.)

So I place the pyramids somewhere on those slopes.

Anyone who knows the country—and a reference to No. 3 Sketch will make it clear—knows that from the point marked P (now occupied by the Russian buildings) the ground falls rapidly to the east. It falls seventy-five feet in 350 yards—from 2,629 to 2,554—it then flattens out and only falls about thirty-three feet in the next 550 yards along the line excavated by Dr. Sukenik in 1925. In other words it is practically flat. The only part of the wall, therefore, that justifies Josephus' description, is that which is on the western slopes.

Identification No. 2

We will now turn to Josephus again—to the account of Titus being attacked during his reconnaissance (quoted earlier).

The first point to decide is the road Titus was on.

Now there are three roads leading to Jerusalem from the Tombs of the Kings, where the Nablus road, along which Titus was coming from Scopus, branches.

The eastern road leads to the Herod's Gate, the centre road leads to the Damascus Gate ; the western road leads to Hippicus (Jaffa Gate).

I submit he was not going along either the eastern or the centre road for the following reasons :

1. The road he was on led him to a gate (the Women's Towers) which was opposite the pyramids. The pyramids

cannot be on either of these roads (all three, I should have mentioned, are supposed to be ancient roads), because :

(i) They must be on sloping ground, and here it is flat.

(ii) They must be a long way west of the Royal Caverns, and here (if the Tombs of the Kings is the right site) they would, if on the centre road, be already almost due south of them, and if on the eastern road, they would be east of them.

(iii) The distance from the city (Damascus Gate) is also wrong, being about two and a half stadia away, which is too little.

(iv) One is not able to explain why, at either of these points, the gardens should be obliquely situated, since the wall continues here at right angles to the road.

(v) Titus would, by turning obliquely off the road, have been riding towards the walls, which would seem a senseless thing to have done, in front of a straight line of wall.

(vi) " Inclining towards Psephinus " does not fit the position, because the gates here from the two roads would be 700 yards and 1,000 yards respectively, from that tower.

(vii) His object, clearly, was to look at Psephinus, outside which he later camped, and he would not have taken either of the two eastern roads to do it.

In short, neither fit with Josephus in any particular.

We will now take the western road. This is the one we should expect him to have taken. It fits in with his subsequent moves. For he pitched his own camp and half his force a quarter of a mile N.W. of Psephinus, and he would naturally want to reconnoitre this section, and examine the walls on the reverse side of the slope which was crowned with the Tower Psephinus. The road, as a glance at Sketches Nos. 2 and 3 will show, runs obliquely to the wall, and being on ever higher ground as he proceeded, Titus would have had a good view of the line of wall to his left front. It is clear that when he left the road he intended to see round the shoulder of Psephinus.

Now we come to identifications.

(1) He left the road obliquely. This unlike the terrain of the other two roads, fits with the idea of his riding uphill, and (because he rode obliquely to the road he had left) remaining parallel to the walls—not going towards them. He could not

continue on the road, because it led straight to the gate. The wall went up the hill "in zig-zags" (Robinson, Bibl. Res. vol. I, p. 314). A reference to sketch 3 will show that it is already being drawn back for its turn to the west, and that, on leaving the road, a diagonal move is necessitated in order to clear the Psephinus tower. No other action is possible. Josephus' use of the word " oblique " here, quite definitely, in my opinion, identifies the western road as the one which Titus was using.

(2) " Oblique " gardens. It is very curious that Josephus should twice mention this word within a few lines, and when referring to different matters. There must be a reason for it.

And the reason is, clearly, to be found in the fact that the wall was here on the turn towards the west. It would have cut through gardens in an oblique way. A zig-zagging wall through gardens must result in oblique gardens. The wall had only recently been finished, and it seems that by "trenches from the wall," we may infer that the ground had been badly cut up in building the wall.

The escort seems to have been much too far behind, for the Jews were able to dash out from the gate, run along the road, and stop them from debouching off the road after him.

The only way in which, it seems to me, we can account for this, and for the fact, subsequently related, that the escort thought Titus was among them again, is to think that gardens, trees, buildings, &c., obstructed not only their view to their right front—otherwise they would have seen Titus in the gardens being attacked—but that the road here was so fenced or built up, that there was only one track off it, which Titus had taken, and which they, headed by the Jews, could not reach.

Titus could not possibly have turned off nearer than 100 yards distant from the gate. The Jews would not, and could not, have foreseen his action ; and had to make an instant decision. By the time they had done this and opened the gates, Titus would be some distance from the road. And yet the Jews were able to run that 100 yards or so, and reach his debouching point before the escort, who were now " galloping " (Thackeray) up in support. This presupposes them to have been following several hundred yards in rear. Therefore, on account of the " oblique " turn towards Psephinus and the oblique gardens, I think we are more justified in placing him on this road than either of the others.

It is true there *may* have been oblique gardens on the other roads. But there seems no reason for it, and there does here. The description certainly falls in with this view for the western road. It doesn't for the others.

So I put him on the western road. And the gate was opposite the monuments.

The distance from the Damascus Gate to this gate, i.e. where the Agrippa line crosses the road, is three and a third stadia.

This also is in accordance with Josephus' " over 3," if the pyramids were close and outside it.

Identification No. 3

Wars v, 2, 3, tells us that the Jews, having decoyed certain Roman soldiers within the space (before the gate) between the Women's Towers, pursued them as far as the Monuments of Helena.

Therefore the monuments were outside the third wall, and not inside it.

It has been suggested by one writer that the Romans would have retired in the direction of Scopus where was their camp, and that this would take them past the Tombs of the Kings.

With all deference, I suggest this is impossible. It is true that the Roman camp was still at Scopus, but Josephus tells us (Wars v, 2, 2) that Titus " gave orders for the whole army to level the distance as far as the wall of the city."

The whole front, therefore, was occupied by Titus' troops, and a sally from the gates would have resulted, and could only have resulted, in the Romans who were attacked, running straight away from the gate to their supporting troops, who included " as many of his choice horsemen and footmen as he [Titus] thought sufficient opposite to the Jews, to prevent their sallying out upon them."

In that case, one cannot accept the suggestion that the attacked Romans started running back through their whole army to Scopus.

They had gone forward from their own men and from Titus who himself told them not to, and who watched the whole proceeding, and they now ran back to their own officers —and to Titus.

As the Jews, standing before the gate, had called to the Romans, the two parties cannot have been far apart. Probably 200 yards is the extreme limit. Josephus tells us that the Romans who went forward to the gates were "some of them that were set in the front of the works." They belonged, therefore, to the covering party for those engaged in clearing the ground. When the Jews drove back the Romans, they only pursued them as far as Helena's Monuments, and not as far as Titus. Had Titus been standing by the monuments there would have been a clash, and Josephus would have said so, since his favourite hero would once more have been in the thick of the fray. We can, therefore, conclude that the pursuit stopped short of Titus. Since it stopped at the monuments, the latter must have been between Titus and the wall. If Titus was as much as 200 yards away, the monuments must then have been within 150 yards or so of the wall.

It may, of course, be said that in that atmosphere the voice would carry 500 yards or so. That is quite possible; but I do not think that the armed covering party would be so far back. They would be out of range of the Jewish darts at 200 yards; and we have no allusion in Josephus to any firing from the walls, whether by darts or from engines. Further we are told that this levelling, on which the whole army were employed, was ordered to be carried out "as far as the wall of the city."

One can, therefore, only suppose that so long as the Romans did not fire at the Jews (at this period) the latter were content to hurry on with their preparations, which, in view of the rioting in the city, must have been sadly in arrears. So I think it reasonable to suggest that Titus was not more than 200 yards away, and the monuments from 100–150 yards from the wall.

Père Vincent's view is that this sally was made from the

Damascus Gate, and ended at the Tombs of the Kings, where stood the pyramids.[1]

The tactical situation, as given by Josephus, will not admit of this. Titus had posted detachments of infantry and cavalry, to prevent sallies. The limit of a sally was, therefore, conditioned by the limit of close protective fire from the walls. Had the pyramids stood much beyond this, the cavalry would have intervened, and the Jews been killed. The tombs of the Kings are half a mile from the Damascus Gate ; and owing to intervening higher ground, are out of sight of it. I cannot admit that the Jews plastered the retiring Romans for half a mile with impunity and darts, and then calmly returned, unimpeded by the Roman Cavalry, who were posted expressly to deal with such excursions. Further, there is no authority in Josephus for placing the nearest Roman troops at such a distance. The indications are all the other way. Neither from North of the Tombs, nor even at them, could the Romans have heard what the Jews at this gate were saying ; nor, as has been indicated, could they see them. The Jews, being compelled, out of fear of the Roman Cavalry, to keep close to their walls, could not have pursued more than 100–150 yards from whatever gate they issued.

Whether we should look for them on the left or right of the road I don't know. My own opinion is that St. Paula's account, given by Jerome, in which she describes them as being on the left, as she approached Jerusalem, does not refer to the pyramids at all, but probably to the Tombs of the Kings site. I should imagine they would have been on the higher slope west of the road, rather than on the lower ground, east of it ; since a monument looks better if you look up to it than if you look down on it. But all that is pure guess work.

This site is just three and a half stadia from the Damascus Gate, and therefore tallies with Josephus' measurement.

This suggested site, therefore, is in accord with every allusion or reference made to it by Josephus. Further no other site, that I can find, fulfils the conditions.

The suggested identification, moreover, has other implications. For if it is correct, it locates the gate by the Women's Towers, and also locates the Agrippa wall at this point, thus confirming Dr. Robinson's observations and measurements at this spot. The identification seems to me so absurdly obvious that, as I said to Canon Hanauer in Jerusalem, I can't help feeling there must be a catch somewhere. I should therefore be grateful to anyone who will show me how it fails.

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[1] La Troisième enceinte de Jérusalem (*Revue Biblique*, October, 1927, p. 546, and note).

As regards the Agrippa wall, remains of a gate have been found in the eastern road, and one is, I understand, suspected, where it cuts the middle road. We cannot, of course, hope to find the Women's Towers gate where I place it, for the site is now a busy cross-roads in a built-up area, with a policeman usually directing traffic, and standing exactly where I put the gateway.

The Present Line of Walls

Those who hold that the present city walls on the north represent with tolerable exactitude the third wall may be expected to object to the above suggested identification. But where along that line can they find a spot which fulfils Josephus' conditions ? They have never been able to do so.

Obviously the western road (leading down to Hippicus (see plan) is in the wrong position. For not only is the distance all wrong, but it is west and not east of where Psephinus would then be placed. Nor have we any evidence, so far as I know, that there was ever a gate at this most unlikely north-west corner. The gate would have to be further east—and where is the road ?

Herod's Gate, where the eastern road enters the city, is equally unsuitable. It, in no way, conforms to Josephus and—did it then exist?

The Damascus Gate is equally impossible. For the lowest part of the ground is west of it, and the ground is already rising eastwards. And this won't do if " κα " implies descent—as I am assured it does. Further, the quarries (identified as the " Royal Caverns " of Josephus under this theory) are only 100–150 yards to the east, and so are not the " great length " Josephus lays down as necessary. Josephus' three stadia is also impossible to reconcile with this position, since it would take us right back, through the " second wall " area, to the old first wall. Further, Josephus' statement that Titus turned off the road obliquely towards Psephinus does not suit this locality. For not only was Psephinus his objective, but unless he turned very nearly at right angles here—when "obliquely" would be a wrong word to use, in a general description—he would not keep his distance from the wall. "Obliquely" is therefore a curious word to use, when the objective is 700 yards away and could not be reached by such a direction.

I stress the question of the Damascus Gate, because my attention has been drawn to a recent press report, in which it is stated that, owing to the discovery of a plinth outside this gate, it has provisionally been identified as the gate of the Women's Towers. I cannot help thinking that this report is unauthorized, since, from a topographical and historical point of view, this identification appears to me impossible. But, with all deference, I suggest it cannot possibly be the Women's Towers.

The Tradition

The question, of course, arises as to how there arose the tradition connecting the Tombs of the Kings with this site. As everyone knows in Palestine, traditions are too often inventions; but I do not know that we need at once assume here that this is the case. I should like to put forward a theory which, whilst it has no evidence whatever to support it, may make the tradition a perfectly honest one and not without some foundation on which it could rest. After all, the reports from Pausanias to the Armenian, covering at least three centuries, and all saying they saw the monument of Helena, cannot have been merely a figment of the imagination.

To begin with, I don't believe they saw her pyramids. If those pyramids stood within 100 yards or so of the third wall, there is little doubt in my mind, that they would have been demolished by the Romans.

Josephus tells us (Wars v, 3, 2) that before Titus attacked the third wall, he levelled the whole place in front of it. He not only cut down hedges, trees, and walls, but "filled up all the hollow places and the chasms, and demolished the rocky precipices (Thackeray says rocky 'protuberances') and reduced the whole place to a dead level." Is it likely he would have left a group of pyramids close to the wall?

We should not expect Josephus to write about desecration of Jewish tombs, since he wrote from Rome, and was careful to praise the Romans throughout. He even says how distressed Titus was at the number of crucifixions. He nowhere stresses their savagery.

And so I assume the pyramids were destroyed. Since their foundations were, I suppose, deeply dug in the rock (for the bodies would have been below the surface of the ground), it is no wonder that we find no trace of them to-day, having regard to the complete disappearance, up to the present, of the very foundations of a large part of the third wall. But after the war it would be a natural thing for the queen's relatives, some of whom probably returned to Jerusalem, to visit the spot, and re-inter the remains in a more appropriate place. With the Tombs of the Kings in the immediate neighbourhood, I think, therefore, that the remains might have been taken there and given a decent burial. A pillar might then have been erected—possibly on the south platform existing to-day, saying that that was her burial place. That would account for the tradition.

I, formerly, held another theory to account for their removal (also without a scrap of evidence). This was as follows: Helena's three pyramids were, I suppose, three tombs, probably for herself and her two sons, Izates and Monobazus. The former had joined the Jewish faith and the latter certainly wanted to, and if I read Josephus correctly, he did. Between Helena's death (c. 50 A.D.) and the outbreak of war (66 A.D.), the queen's family living in Jerusalem would not have been satisfied with these pyramids for their family sepulchres.

If the Tombs of the Kings had been an old disused quarry, this might have served their purpose, and they may have turned it into the family vault. The Jews laid great stress on a family all being buried together, for they held that otherwise they would not meet their relatives in Sheol. This may have induced them to move the bones of Helena to the new site. The pyramids would remain, though untenanted.

If Père Vincent is correct in assigning the date of these tombs to the late Asmonean period, this theory would, of course, hold no water. For new converts, although of royal blood, could scarcely have been permitted to purchase such a site. Further, Josephus' silence on the point leads us to assume that her body was still in the pyramids at the time of the siege.

But after the destruction of Jerusalem anything may have happened, and so I think it possible that Queen Helena may then have been re-interred at the Tombs of the Kings. This is not to say that I think her body was found by De Saulcy. I don't know if it was or not—and I do not care. That is purely an archaeological matter on which I can express no opinion.

Measurements

Consequently, unless evidence to the contrary is forthcoming, I feel that, as regards the pyramids, Josephus, Robinson, Sukenik, and, perhaps I may add, the measurements fit one another like the pieces of a jig-saw puzzle.

If this is the case, I submit we can now locate the pyramids, the Women's Towers, and Josephus' point of measurement—the Damascus Gate. Can we then any longer doubt that the Sepulchral Caverns are to be placed at the Tombs of the Kings?

A PHOENICIAN NAVAL GAZETTE

New Light on Homer's Catalogue of Ships

By T. H. Gaster

§1. The reputation of the Phoenicians as skilled navigators is familiar to all students of antiquity. Hitherto, however, it has depended for the most part upon the statements of comparatively late Greek writers.[1] A special interest therefore attaches to a cuneiform document unearthed last year at Ras Shamra (ancient Ugarit) on the north coast of Syria and recently published by M. Chas. Virolleaud in the French periodical *Syria* xviii (1937), pp. 167–8.

This document, inscribed on both sides of a now broken clay tablet, dates from the fifteenth century B.C., and enumerates the complements of certain vessels evidently sailing from the port of Ugarit. In view of its cardinal importance and of the fact that it lends itself to so much further illustration, a new edition would appear to be abundantly justified.

The accompanying plate contains a transcription of the text in facsimile form,[2] a restoration (after Virolleaud) and a provisional rendering.

§2. *Contents.* The Obverse of the tablet records the number of plain soldiers sailing in three ships. The Reverse records three groups of officers. It is therefore apparent that the latter were, in fact, those in command of the former.

The ships are registered under the names of their captains, and in most cases the provenance of both men and officers is duly mentioned.

§3. *Nature of the Ships.* The ships were warships. This is clear from the two words applied to their complements.

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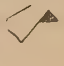
[1] Cf. Homer, Od. XV. 415: *Φοίνικες ναυσίκλυτοι*; Athenaios vi, 273e: *Φοινίκων τὰ ναυτικὰ εἱρόντων.* Pliny, HN. vii, 208, credits the invention of cargo-boats to Hippos of Tyre, whilst Clement of Alexandria (Strom. I. §16) preserves the tradition that the Sidonians invented the *τρίκωπος ναῦς*.

[2] I follow Virolleaud's system of transliteration, except that for the sign  I write ž instead of ś$_2$, in accordance with Harris, JAOS. 1935, pp. 95-100.

The first is *ṣ b u,* which means properly " war-host " or " army."

> *ṣ b u* occurs in this sense in Hebrew, Assyrian, South Arabian and Ethiopic, as well as in the Ugarit texts themselves (viz. 1 Keret 86, 88, 178, etc.).

The second is *ḡ r*. Whether we construe this as a noun (viz. " expeditionary force ") or as a verb (viz. " they went out to the encounter "), the word derives from a root *ḡ-w-r* meaning " to go out on a warlike expedition, " and thus argues that the ships were engaged in a naval encounter.

> *ḡ-w-r* is used in this sense in Arabic and S. Arabian (e.g. CIH.CCCL, 2 : *wtqdm matn asdm w h ḡ r w ʿdy ars̱ Ḥmrm whrg bhw asm*, " 200 soldiers swept down and *made a raid* upon the territory of the Ḥimyarites and slew men therein "). Moreover, it is used with specific reference to an engagement at sea in the Ras Shamra text, *The Combat of Baal and the Waters*, 6–7 : *yḡr tḥt kse Zbl-Ym* " let them go out to combat beside the throne of his Highness of the sea " (v. IRAQ 1937, p. 28), thus clinching the interpretation here.

In connection with the use of these terms attention may be called to the fact that Egyptian warships were somewhat similarly styled *n mšʿ* which means literally " (ship) of the war-host." This fact is the more important when it is remembered that at the period in which our text was written Egyptian ships were frequently docked at Cyprus, which lies opposite Ras Shamra. Egyptian terms would therefore have become familiar to the men of Ugarit. Indeed, it is significant that in Bileam's oracle concerning the " ships which shall come from Kition (Kittim) " and attack the Syro-Palestinian coast (Num. xxiv, 24), the antiquity of which is now assured (v. Albright, *The Archaeology of Palestine and the Bible*, p. 146), the word used for " ship " (viz. צִי) is the Egyptian *ḏ; . t*, Coptic *čoi* !

§4. *Number of the Ships*. Three ships took part in the expedition. This may perhaps be illustrated from the fact that in land campaigns it was customary to divide the troops into three divisions, in order to embarrass the enemy at once on both flanks and in the rear.

> This strategy is mentioned in O.T. in Judges vii, 16f

(Gideon against the Midianites); 1 Sam. xi, 11 (Saul against the Ammonites), and 2 Sam. x, 2 (David at Mahanaim).

We may well believe that this method was also employed when the army engaged in encounters at sea.

§5. *The Officers.* The officers are described as *bn śmrm.*[1] This expression recurs in another Ras Shamra text (Rs. 8183+8201, ii, 10; SYRIA 1937, 160), where it undoubtedly means "overseers" (in contrast to *'bdm* "workmen," ibid. ii, 2). The function of such an officer is well illustrated (though from an admittedly late source) in a passage of Xenophon's *Oeconomicus* (VIII. §§15–16). Describing a typical Phoenician vessel, the Greek writer observes:

> "I came upon the captain's assistant (*diakonos*), who is called 'the look-out man' (*phrōreus*). . . . He is acquainted with the position of every article on board, and that to such a degree that he can tell even from a distance where everything lies and how many there are of any given article. . . . I saw him examining the ship's equipment at his leisure and, somewhat surprised, asked him what he was doing. "Friend," said he, "I am making an inspection in case of emergency, so as to be sure where everything is, whether anything is missing, and whether things are in proper order."

§6. *Provenance of the Ship's Complement.* Five places are named from which men and officers came. They are: (i) Ṭ-B-Q, (ii) M-'-Q-B, (iii) P-D, (iv) S-N-R and (v) G-B-'-L.

Some of these names are mentioned again in a list of persons (taxpayers ?) discovered at Ras Shamra in 1935 and published in SYRIA XV, 244–9 (v. also Gaster, SYRIA XVI, 225–7; Dussaud, ib. 227).

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[1] It is worth noting that Ugaritic writes *śmr* instead of the normal *šmr* which is required in view of the Arabic cognate *ṯ-m-l* and Aramaic *ṯ-m-r*. Evidently, the word had already become crossed with the independent root *ś-m-r* "keep vigil"=Arabic *sh-m-r*, on which v. Barth, Etym. Stud. p. 43, n. 2. It is this second root which underlies Hebrew *ashmurah* "watch" and *shimmurim*. The crossing also appears in the Aramaic אשתמר of APO lvi, 3, 7, and in the Samaritan שמר instead of תמר. I originally thought that *bn śmrm* ought therefore to mean "look-out men" rather than "overseers," but in view of the same spelling in SYRIA 1937, 160, where it cannot mean anything but the latter, this view is scarcely tenable, and we must assume an early crossing. *śmr* in this sense is clearly the Amarna *šimirum* of Winckler lxxx, 23, which glosses *rabiṣu*. In further support of this equation, cp. Hebrew שומרי משמרת בית המלך of 2 Kings xi, 5, with Ras Shamra *rabiṣ bit šarrati* of the text RS. viii, 208 (line 3), published by Thureau-Dangin in SYRIA 1937, 253.

G-B-‘-L is quite clearly the Hebrew GEBAL, etc., i.e. Byblus—a leading port whence sailors might well be recruited.

S-N-R is undoubtedly the Biblical SENIR (Deut. iii, 9; 1 Chron. v, 23; Cant. iv, 8) and the Assyrian SANIRU (III Rawl, v, No. 6, 45)—a name given by Arabic geographers to the region north of Damascus.

As for Ṭ-B-Q, I suggest that this is the Hittite TABIKA, Assyrian DABIGU, Byzantine DABĒKON and modern DABĪQ, S.W. of Killiz, on the river Qoweiq.[1]

> On this site, v. Hrozný, ARCHIV ORIENTÁLNÍ 1935, p. 161 (with photograph); Dussaud, *Topographie Historique de* la Syrie, p. 474 (identifying also with *Diba* of Ptolemy, V. 14, 8 and *Tyba* of Cicero, *Ad Familiares* xv, 1, 2); Kraeling, *Aram and Israel*, p. 71; Frd. Delitzsch, *Wo lag das Paradies*, p. 264; Sachau, *ZA* 1897, p. 47. For modern Ṭoipuk=“Lesser Dābiq,” on the Qoweiq, v. ZDPV, 1923, p. 179, No. 151.

M-‘-Q-B still awaits identification. The name is probably Semitic, deriving from the root *‘-q-b* which in Ethiopic yields a noun meaning “hill, highland.” There is a place called ‘AQABE, some ten miles N.W. of Ras Shamra which might well claim consideration, though its antiquity would have first to be assured. There is also an ‘AQABA in the very region of Senir (Dussaud, *op. cit.* p. 390).

For P-D I have no definite suggestion, but would call attention to FIDYO some twelve miles S.W. of Ras Shamra.

If these identifications are correct, it would appear that the complements of the ships were recruited from districts near the port itself, or in ready communication with it *via* one of the regular caravan-routes. Ras Shamra can be reached from Killiz *via* the established route over * Katma, Jindaris, Jišr el Ḥadid and Antioch.

§7. *Proper Names*. The captains of the three vessels were respectively (a) ‘-D-N, (b) K-Š-A-N and (c) A-B-D-Ḥ-R. These names appear to be Semitic.

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[1] Note that the neighbouring city of Alalḫa (de quo v. Hrozný, *AOr.* 1935, p. 162) is indeed mentioned, under the form Alatḫa, as in contact with Ugarit, in the Ras Shamra letter published by Virolleaud, *Danel*, pp. 22-3. See thereon W. F. Albright, BASOR, No. 63, pp. 24-5.

(a) ‘-D-N : Two explanations of this name are possible, depending on whether we regard the final -N as radical or not. In the former case, cp. עֵדֶן 2 Chron. xxix, 12 ; xxxi, 15 ; עַדְנָא Neh. xii, 15 ; Accd. ADNÂ, BEUP. viii, 39 ; S. Arabian (f.) עדנת (Glaser, 1238), and also עָדִין Ezra ii, 15 ; Neh. vii, 20, &c.[1]

In the latter case, the final -N will be the well-known suffix which is particularly common in Ras Shamra proper-names (v. Q.S. 1934, 95), as also in S. Arabian onomatology and in that of the Hammurapi dynasty at Babylon. We may then cp. עֲדָיָא Neh. xii, 16 ; עֲדִיאֵל 1 Chron. iv, 36, &c.; עֲדָיָה 2 Kings xxii, 1, &c. Again, if we prefer to derive form rt. עדד the O.T. name עִדּוֹ invites comparison.

A Ḫa-da-an-an (Ḫada-ilan ?), from the reign of Yawium (RA viii, 74, 18) may perhaps also be cited.

(b) The name K-Š-A-N recalls in form Ḫ-R-A-N of the Ras Shamra text, Bauer lvi, 30. It is doubtless connected with the familiar Kassite *Kašša* and *Kaššua* (Tallquist, APN 263), with which Posener (SYRIA 1937, 193) would also identify the foreign *K-s-(i)* of the eighteenth dynasty Egyptian list, Louvre E. 14355.[2] The name also recurs the divine element *Kuššu* in Nuzu onomatology (v. Harvard Sem. Series v, 26, 27 ; Oppenheim, AfO 1937, 33). In form, K-Š-A-N would seemingly represent something like *Kaššua*, with overhanging *-a*, plus the familiar Ras Shamra *-n*, which appears as *-ni* in Hurrian names.

(c) A-B-D-Ḥ-R recurs in Bauer lvi, 36, where he is "a man of S-n-r." The analysis of the name is doubtful. Maisler suggests אב+ד+חר "Father of Horus," but the formation is unparalleled. Comparison with *A-B-D-ʿ-N* in Bauer lvi, 31, suggests that the first element is *ABD*, but I eschew all further guesses.

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[1] Although the underlying rt. appears in Ar. as *gh-d-n*, it has the form *‘-d-n* in Ugaritic ; cp. 2 AB, v. 68-9.

[2] This, however, is doubtful, in view of the sibilant. Nevertheless, note that we *do* actually find such Egyptian transcriptions as *sa-ra-qu*=*ṯ-l-g* and *Sa-ka-ma*=שְׁכֶם=S. Arab. and Ugaritic ח̄כמת showing that Eg. *sa* can occasionally stand for Semitic *ṯ*,—the sibilant presupposed by the Ras Shamra spelling K-š-a-n.

It will be observed that ABDḤR, who seems to have come from S-n-r (v. supra) commanded a boat manned by men of P-d, whilst the four officers from Ṭ-b-q do not seem to have been in charge of the ship manned by their own townsmen. This may have been a deliberate matter of policy. At any rate, it merits attention.

§8. *Homeric Analogies.* Assuming that our interpretation is correct, this text will be a kind of " naval gazette," recording the number of men who went on a certain expedition, together with the names of their commanders and places of origin.

Now, this at once recalls the famous List of Ships in the second book of the Iliad (lines 494–877). Here we have very much the same thing as in our text. The numbers of the ships sailing to Troy, the names of their commanders, the provenance of their crews and—in one original case at least (l.510)—the number of men per ship are all duly recorded. The following abbreviated extract will illustrate the point :

Βοιωτῶν μὲν Πηνέλεως καὶ Λήϊτος ἦρχον,
'Αρκεσιλαός τε, Προθοήνωρ τε, Κλονίος τε·
ὅι θ' Ὑρίην ἐνέμοντο, κὰι Αὐλίδα πετρήεσσαν,
Σχοῖνον τε, Σκῶλόν τε, πολύκνημόν τ' 'Ετεωνὸν,
Θέσπειαν, Γραῖάν τε καὶ εὐρύχορον Μυκαλησσόν·

. . . .

τῶν μεν πεντήκοντα νέες κίον· ἐν δὲ Ϝεκάστῃ
κοῦροι Βοιωτῶν ἑκατὸν κὰι ἐϜείκοσι βαῖνον.

(494–510)

" The Boeotians did Pêneleôs and Lêïtos command, along with Arkesilaos, Prothoênōr and Klonios. These were the men who dwelt in Hyriê and rocky Aulis, as also in Schoinos, Skôlos, rugged Eteônos, Thespeia, Graia and broad Mykalêssos . . . of these fifty ships set sail, and in each went sixscore Boeotian lads."

Notice the closeness of the parallelism. First, the commanders are named, then the provenance of the warriors, and lastly their number. Moreover, the expression ἑκατὸν καὶ ἐϜείκοσι βαῖνον (" sixscore came ") answers exactly in form to the *ḡr tšʿm* (" ninety went forth to the encounter ") of our text, incidentally supporting our view that the word *ḡ-r* is to be read as a verb.

Fifty years ago, Homeric scholars were inclined to regard the Catalogue of Ships as a later interpolation, or series of interpolations, from a foreign source, or sources, and support was found for this view in the fact that it is omitted in several MSS of the Iliad and that it was known in antiquity as an apparently independent work under the title of "Boeōtia."[1] In his *Rise of the Greek Epic* (p. 164), Professor Gilbert Murray suggested that it had been incorporated into the Iliad from a now lost poem, the *Cypria*, dealing with the assembly of the fleet at Aulis. Dr. A. B. Cook has, however, kindly assured me that the tide of criticism has now turned, and that competent scholars are to-day inclined to accept the Catalogue as belonging to the early strata of the Homeric poem. May we not now believe, in the light of our Ras Shamra text, that it was based upon shipping-lists current in the ports of the Mediterranean area as far back as c. 1400 B.C.?

§9. *Summary.* Piecing together all that has been sketched above, the following is the resultant picture :

Our text is a naval gazette. It is the record of a naval campaign off the coast of Ugarit. Three ships engaged in the campaign, just as on land an attacking force was often divided into three divisions. The ships were manned by soldiers and sailors recruited from districts around Ugarit or in touch with it by means of the standard caravan routes. They were commanded by officers whose duties included those of the "look-out man," and who were therefore called *bnśmrm* which includes this meaning. The list is the prototype of that found in the Homeric Catalogue of Ships.

§10. *Purely Philological.* For the sake of completeness, I here add a philological point of some interest to those working on the Ras Shamra texts.

The word rendered "war-host" is written *ṣ b u*, but this ought by rights to be *s̱ b u*, for the first letter answers to Arabic *ḍad* and Eth. *ṣappa*. This laxity, however, recurs often in Ugaritic. The following instances may be cited : (i) *ṣen* for *s̱en* "sheep"; (ii) *ṣḥq* for *s̱ḥq* "laugh"; (iii) *ṣmd* for *s̱md*

[1] Obviously derived from the opening line of the Catalogue (Iliad ii, 494): Βοιωτῶν μὲν Πηνέλεως καὶ Λήϊτος ἦρχον.

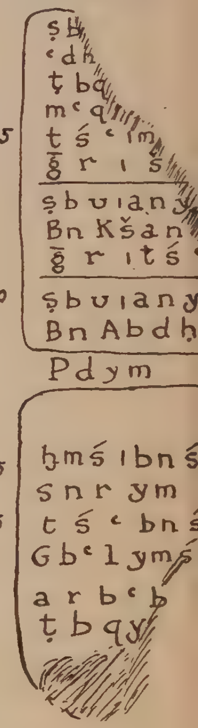
“ bind ”; (iv) *arṣ* for *ars̱* “ land ”; (v) *rḥṣ* for *rḥs̱* “ wash ”; (vi) *ḥrṣ* for *ḥrs̱* “ gold ”; (vii) *mḫṣ* for *mḫs̱* “ smite ”; (viii) *ṣbṭ* for *s̱bṭ* “ seize ”; (ix) ‘*ṣ* for ‘*s̱* “ wood.” Reversely, in Ethiopic original *ṣappa* came later to do duty for plain *ṣadai*. A similar confusion between “ covered ” and “ uncovered ” letters in Ugaritic accounts for ‘*lm* beside *ḡlm* “ servant,” ‘*dn* for *ḡdn* “ luxuriance ” (2 AB. v, 68–9) and ‘*rb* for *ḡrb* “ enter ” (so also in Minaean). Ugaritic was thus slowly approaching the position of Biblical Hebrew.

R. S. 8279.

	TRANSLATION	RESTORATION
	Host of the ship	ṣb[u any]
	of ʿ-D-N ......;	ʿdn.......
	men from Ṭ-b-q and	Ṭbq[ym w]
	men from M-ʿ-q-b;	Mʿq bym
5	nine ....;	ṭsʿ m.....[a]
	eighty(?) men went [on the expedition	ḡr š.......[b]
	Host of the ship	ṣbu any
	of BEN K-Š-A-N;	B́n Kšan
	ninety men went on [the expedition	ḡr tśʿ m
10	Host of the ship	ṣbu any
	of BEN-A-B-D-Ḥ-R;	Bn Abdḥ[r]
	men from P-d.	Pdym
	Five look-out men,	ḫmś bn śm[rm]
	men from S-n-r	Śnrym
15	Nine look-out men,	tśʿ bn ś[mrm]
	men from Byblos ...	Gbʿlym ś........
	Four look-out men ,	arbʿ b[n śmrm]
	men from Ṭ-b-q.	Ṭbqy[m]

[a] Possibly, m[l ḫ m] "sailors".
[b] Probably š[m n m] "eighty".

TRANSLITERATION


ṣb
ʿdn
ṭbq
mʿq
5
tśʿm
ḡrıś
ṣbuıany
Bn Kšan
ḡrıtś
10
ṣbuıany
Bn Abdḥ
Pdym
15
ḫmśıbnś
Snrym
15
tśʿbnś
Gbʿlymś
arbʿb
ṭbqy

A PHOENICIAN NAVAL GAZETTE
The Ras Shamra Text with transcription and translation

T. H. Gaster]

SOME ANCIENT HEBREW SEALS

By A. Reifenberg (Jerusalem)

All the seals described here were bought in Jerusalem and they were all probably found in Judaea with the exception of No. 1 (Trans Jordan ?) and No. 2 (Galilee ?). They are all in the usual ovoid form, except No. 10, which is conical.

No. 1. The stone is a white opal, 22 mm. long and 9 mm. thick. On this seal a sacrifice is depicted. The hand of the sacrificer is raised in the gestus of adoration. The animal represented is probably an ibex. The inscription should be read :

לאלסמכי For Elsmachi.

It should be observed, however, that the reading of the last two letters is uncertain. The name סמכיהו occurs in 1 Chron. 26, 7, and in the Lachish Letters (H. Torczyner, Teudoth Lachish in " Knesset," Tel-Aviv, 1936, Letter No. 4). The name סמכי is found in an Aramaic papyrus (A. Cowley, Aramaic Papyri of the fifth century, 1923, No. 49 ; besides the Babylonian name Samaki-ilu (Tallqvist, Neubabylonisches Namensbuch, 1905, No. 180) should be compared. The name is theophoric and means " God is my support." It may be mentioned that the Hebrew סמך apart from its general meaning is especially used in the sacrificial language.

No. 2. Unlike all the others, this seal, an amethyst, is not pierced and was therefore probably used as a ring-stone ; it is 10 mm. long and 6 mm. thick.

In the upper section the Egyptian sign of life is engraved, representations of which occur frequently on Hebrew seals ; in the lower section a winged solar-disk of Northern-Syrian type is depicted, similar to those represented on jar handles (*cf*. Diringer, Le Iscrizioni Antico-Ebraiche Palestinesi, 1934, Tav. XVIII, No. 15 et seq.); besides such representations of the winged solar disk in other shapes also occur frequently on various Hebrew seals. The inscription reads :

לאביו For Abiyu.

The name is of course an abbreviation of the biblical name Abiyah(u) and occurs also frequently on ostraca (Diringer, l.c., p. 40, No. 2). The same name has likewise been found on another seal (Diringer, l.c., p. 221, No. 65).

No. 3. The seal is a white opal, 12 mm. long and 6 mm. thick. The inscription reads :

להושעיהו
בן שלמיהו For Hoshayahu the son of Shalemyahu.

These are both well-known biblical names and occur also in an abridged form in Aramaic papyri (A. Cowley, l.c.). In the form השע the name has also been found on jar handles as well as on another seal. (Diringer, l.c., p. 121, No. 4, and p. 204, No. 46.) The name Hoshayahu is found in the Lachish letters as well. (Torczyner, l.c., No. 3.)

No. 4. The seal is red carneol, 10 mm. long and 7 mm. thick. The inscription reads :

לאיעדה For Ayadah.

The name is otherwise unknown.

No. 5. The stone is a red carneol, 15 mm. long and 7 mm. thick. The name should probably be read :

לגדיהו
בן בצי For Gadyahu the son of Bezai.

It should be pointed out, however, that the last letter is uncertain. Both names are known from the Bible and the name גדיו also occurs on ostraca (Diringer, l.c., pp. 23 et seq. and pp. 26 and 29 et seq.).

No. 6. The seal is made of ivory, 13 mm. long and 8 mm. thick. The inscription reads :

לישע
עדאל For Yesha (the son of) Edel.

It should be pointed out, that the form of the yud is most uncommon. There are two vertical strokes at the end of the upper line and a star at the end of the lower line. ישע of course corresponds to the well-known biblical name ישעיה or ישעיהו and occurs in the latter form also on another seal. (Diringer, l.c., p. 209, No. 52.) In the form of ישעיה the name is found several times in Aramaic papyri (Cowley, l.c.). With regard to the name עדאל similar forms as e.g. עדיאל (1 Chron. 4, 36 ; 9, 21 ; 27, 25) or עדיה and עדיהו should be compared.

No. 7. The seal is red carneol, 14 mm. long and 7 mm. thick. The inscription reads :

לאדתא א
שת פשחר For Adata the wife of Pashhur.

The feminine name Adata seems to be unknown. The name פשחר corresponds to the well-known biblical name פשחור.

No. 8. The stone is a yellowish limonitic limestone, 13 mm. long and 7 mm. thick. On this seal a she-ibex is seen suckling its young one. Above the animals a human figure is represented. There is a sign like a half-moon on the right. I propose tentatively to read the inscription :

לשניו For Sheniyu.

The fourth letter is most doubtful. I do not think that the name could be read לשכיו, thus corresponding to the biblical name Shachia. (1 Chron. 8, 10.)

No. 9. The seal is a reddish limonitic limestone, 15 mm. long and 9 mm. thick. The inscription reads :

מכי
שקניה Machi (the son of) Sakenyah.

The name Machi occurs not only in the Bible (Num. 13, 15) but also on an Aramaic papyrus (Cowley, l.c., No. 1, 11). The name Sakenyah is unknown.

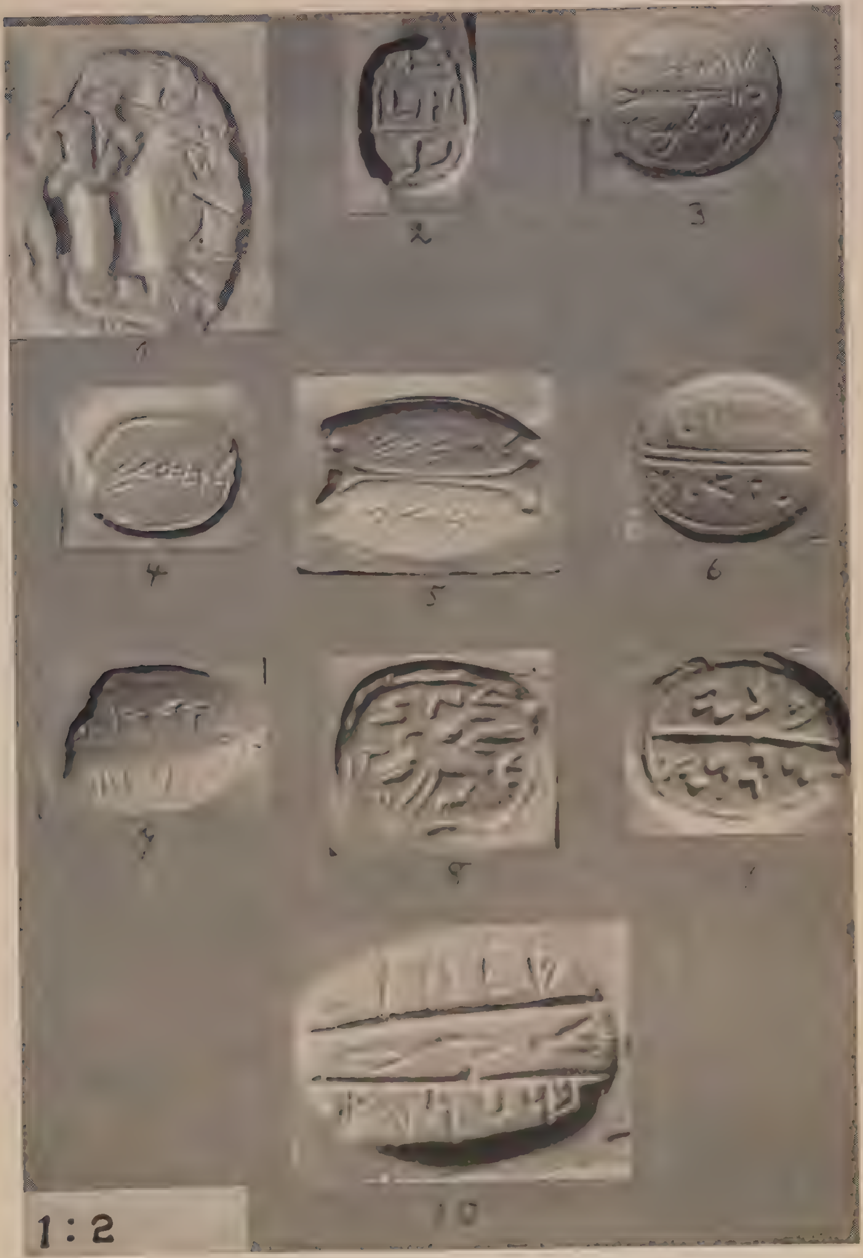
No. 10. The seal, said to have been found near Ashdod, is a red and white stained quartzite, it is of conical shape, 21 mm. long and 27 mm. high. The inscription reads :

שלמאל
בן עמשא Shlomel, the son of Amasa.

The fourth letter in the upper register is uncertain, but it is most probably an aleph. Similar theophoric names like

Shlumiel, &c., are well known from the Bible, as is also the name Amasa. The form of the letters, not only the open ayin and beth, but also the mem and the shin, are very similar to the letters found on Aramaic papyri in Egypt. Although the peculiar form of the mem already occurs on an ostracon from Ophel (Diringer, l.c., p. 74), and in the Lachish Letters (Torczyner, l.c.), nevertheless we are inclined for various reasons to date the seal rather late (fifth century). Apart from the careless execution of the seal its conical shape is also in keeping with this date (Diringer, l.c., p. 159).

The author is indebted to Professor L. A. Mayer of the Hebrew University for many valuable suggestions.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SOME ANCIENT HEBREW SEALS

NOTES ON THE BEDOUIN TRIBES OF BEERSHEBA DISTRICT, III

By S. Hillelson

IV. *The Ḥanājira*

The Ḥanājira are said to be derived from the Sawārika, and it is alleged that they came to their present country from east of the Jordan during the early conquests of Islām. At the present time they are divided into four main sections: (1) Ḥanājira of Abū Midyan (some 2,000 souls); (2) Ḍawāhira (about 500); (3) Ḥamadāt (about 1,000); (4) Nuṣayrāt (about 1,000): each of these has a number of sub-sections.

Their brands are the Cross and one other unidentifiable from the diagram given by ʻArif Effendi. They are ardent Moslems and strict in the observance of prayer; and they own fertile lands suitable for the cultivation of sesame and all summer crops.

As is the case with most of the tribes of the area, a distinction is made between "true Ḥanājira" and sections of different origin; but the traditions on this subject are by no means unanimous.

None of the tribesmen were able to explain the origin of the name Abū Midyan which is borne by an important section, It will be recollected that Doughty met a man of this name. who had traversed the whole world in the guise of a dervish: according to Doughty this man hailed from Khaybar, and it is impossible to say whether he is in any way connected with the Ḥanājira of Abū Midyan.

The Nuṣayrāt are certainly not of Ḥanjūrī origin; for they came to the Beersheba area before the rest of the Ḥanājira and before the other tribes, and they ranked as an independent tribe until the time when Ra'ūf Pasha was Mutasarrif of Jerusalem: when it occurred to Ra'ūf to create a "mudirīya" of the Ḥanājira, with Abū Ḥajjāj as "mudīr," he included the Nuṣayrāt in order to create a larger unit: the Nuṣayrāt, nevertheless, regard themselves as being of nobler lineage than the

Ḥanājira, and they will not give their daughters in marriage to a Ḥanjūrī, unless he be of the Nabāhīn, or the Manādīl, or the Ṣawāwīn.

The Nuṣayrāt trace their descent to the Aws and Khazraj: they relate that there were three brothers. Nuṣayr, Yāsīn, and Nāṣir, who migrated from Mecca to Ḍānā in the district of Kerak; a man of Ḍānā put some ashes into the food which their sister was taking to them in the cultivation, for which reason they slew the man who had thus insulted them: he happened to be the son of the village shaykh and, fearing the consequences, they migrated to Kafr Qadūm in the Nāblus hills; there they quarrelled with the chief of the village, whose name was Shiteywī and, having killed his people, the brothers separated, Yāsīn alone remaining at Kafr Qadūm. Nuṣayr went to ʻAyn al-Daqīq (a place now known as Deyr al-Balaḥ) and the Nuṣayrāt are descended from him. They still make annual pilgrimages to the grave of their ancestor, which is situated to the north-east of Deyr al-Balaḥ.

The name Nuṣayrāt also occurs amongst the Ḥuweyṭāt of the Tihāma, where it is borne by a family of the Qurʻān section: on the other hand there is a small section called Qurʻān amongst our Nuṣayrāt: they are regarded as being of Egyptian origin, and are held in low esteem.

The present Shaykh of the Ḥanājira, Furayj Abū Midyan, has had an interesting career: starting life as an ordinary, unlettered Bedawī, he acquired wealth and influence, and made his tribe and family famous in the land and, having at one time been a hunted outlaw, he became the friend of the rulers of the country. His story, told in his own words, is as follows:

"I was born in the year 1288 of the Flight and lost my father in my early youth, for he was slain in a battle between the Tiyāha and the Tarābīn in 1293, and was buried at al-Ḍāhira: I was then a quite obscure person, and remained quite unknown until the year 1328 when I was made a member of the Administrative Council (*Majlis al-Idāra*) of Beersheba, and after the outbreak of the War I was entrusted with the task of collecting grain for the Turkish forces encamped in this area. When the Bedouins were ordered by the Turks to evacuate their country, with a view to keeping them outside the war-zone upon the approach of the English, I was unable to accompany my clan on account of illness, and I remained in my *ayka*, which is the name the Arabs give to the place where they store their crops. When the English arrived they interned me at Deyr al-Balaḥ.

During my captivity I was recognized by the Director of Intelligence as the man who once, in the old days, had given him a mare: and he showed his gratitude by treating me with the greatest favour and introducing me to the army-chiefs: I found great favour, especially, with Parker Pasha, who gave me permission to harvest all the crops left behind by the men of my clan—for they just happened to be ready for cutting—and he ordered a large number of the people of Khān Yūnis and Banī Suheyla and Deyr al-Balaḥ to assist me in the harvest work: thereafter he provided a military guard for the garnered grain. I remained at Deyr al-Balaḥ in the greatest comfort until the end of the War: then I returned to our camping-places and was made shaykh of my people. In 1922 I was appointed head of the Beersheba municipality, and received an honorary M.B.E. A short time afterwards I became a member of the Advisory Council instituted by Sir Herbert Samuel, and I was also made a member of the *majlis al-dumum*, i.e. the court instituted for the settlement of ancient blood-feuds; in addition I was appointed a member of the Tribal Court at Beersheba, and thus I remain until the present day."

V. *The Jubārāt*

The Jubārāt claim as their ancestor Jābir al-Anṣārī, a companion of the Prophet of the tribe of Quraysh,[1] who is buried at al-Ṭufayla in Transjordania. During their wanderings in the time of the early conquests of Islām (at which time they are already represented as a large tribe) they split up into different sections, some of them migrating to ʻIrāq and others to Syria. The people, with whom we are here concerned, occupied a territory extending from Gaza to ʻAwjat al-Ḥafīr.

The chief of the Jubārāt at Gaza in those days was Abū Jabala, and there is some divergence of opinion as to his issue:

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[1] There is a contradiction in these statements, since the epithet Anṣārī is not properly applicable to a Qurashī, but only to the people of Medīna who joined the Prophet after the "hijra."—S.H.

some hold that there were four brothers: Zāhir, the ancestor of the Zawāhira or Duqūs; Khalāwī, ancestor of the Khalāwīya; ʻArāb, ancestor of the ʻIreybāt; and Faqīr, ancestor of the Fuqarā and the Ḥasanāt. The other theory, worthy of greater credence according to the author, is that ʻArāb and Faqīr were not brothers but nephews of the other two. All sections of the present-day Jubārāt, which do not reckon their descent from one or other of these four, are of foreign origin, though they joined the Jubārāt by way of alliance: this applies to the Ratīmāt, the Saʻādna, the Qalāzīn, the Sawārika, and the Walāyida. It is also held by some that the Wiḥeydāt are not true Jubārāt, since none of the descendants of Jābir al-Anṣārī was named Wiḥeyd.

In the old days the Jubārāt were a powerful tribe wealthy in stock and in horses, but they lost everything, and never recovered from the reverses they suffered in the time of Ibrāhīm Pasha, when they refused to make their submission to the government and thus roused Ibrāhīm's anger against them. The neighbouring tribes were invited to despoil them with impunity, and the Pasha led a strong expeditionary force against them, which they were powerless to resist. Four hundred of their men were sent to Acre as prisoners, and later 300 more suffered the same fate: in the end none were left in the homes of the tribe but old men, and women and children. Of the prisoners at Acre very few ever returned: some remained at Acre until they died, others were sent to Constantinople or Anatolia; it is said that certain remnants of the Jubārāt, whom Ibrāhīm Pasha scattered at that time, are still to be found at Ḥoms and Ḥāma, as well as in ʻIrāq and in Egypt.

The Duqūs

This section, descended from Zāhir, held the paramount place amongst the Jubārāt: formerly their shaykh, Ḥusayn Ibn ʻId Ibn ʻAwda al-Duqs, held authority not only over the Duqūs but over a number of other sections as well, but there are now four independent sections: Duqūs, Sawārika, Rawāwiʻa, and Walāyida.—The Duqūs proper do not exceed 600 in number; their tribal brand is the *bāb*.

The Rawāwiʻa

All that can be said concerning this section is that they are descended from Khalāwī, and that formerly they ranked as a sub-section of the Duqūs, from whom they separated as recently as 1929 : they number no more than a hundred, and use the *bāb* as their brand.

The Wilāyida

These people also were formerly a branch of the Duqūs, from whom they separated quite recently : they claim to be descendants of Khālid Ibn Walīd and to have come to Beersheba at the time of the early Moslem conquests ; their brand is the *bāb* to which a *muṭraq* is attached on one side.

Abū Jābir

This branch of the Jubārāt numbers about 500 people divided into several sub-sections ; they are also called ʻIreybāt, as they claim to be the descendants of ʻArāb. Their brands are the *bāb* and the *shāhid*.

The Wiḥeydāt

The status of the Wiḥeydāt amongst the Jubārāt sections resembles that of the Ghawālī amongst the Tarābīn, and of the ʻAllāmāt amongst the Tiyāha : it is a strange fact that none of their early ancestors ever had more than one son until the days of Rabāḥ : thereafter they were more prolific. They number about 600 and use the *miḥjan* (?) as their brand.

There is difference of opinion as to whether they are of the same origin as the Tarābīn section which bears the same name. In support of the contention it is pointed out that the two sections use the identical brand : moreover the Tarābīn Wiḥeydāt refuse the connubium to all other tribes (even to the other Tarābīn) yet intermarry freely with the Jubārāt-Wiḥeydāt.

There is a tradition which connects the Wiḥeydāt with the lineage of Ḥusayn, the grandson of the Prophet : the story of their early wanderings, after their ancestor Fāʻūr left Arabia, presents no features of interest.—Another theory denies all genealogical connection between the Jubārāt-Wiḥeydāt and their name-sakes amongst the Tarābīn.

The Ratīmāt

Literary evidence, according to the author, connects the Ratīmāt with the ʻAqīl of Baḥreyn: their own tradition claims as the tribal ancestor one Ṣāyiḥ, after whom they are also called Ṣawāyiḥa; Ṣāyiḥ was a Shammarī, and a family of this name exists amongst the Shammar of Nejd. The different sections of the Ratīmāt are descended from the sons of Ṣāyiḥ; and the name is derived from the tree called *ratma*; because it was under a tree of this name that the tribesmen entered into a covenant which put an end to a tribal feud. In the old days, they say, they were numerous and owned a large territory, and they levied *khāwa* on part of Jebel al-Khalīl. The story of the Covenant of the Ratma is as follows:

A certain man of the Ratīmāt named Abū Māsūḥ, having killed a fellow-tribesman of the family of Abū Khaḍra, fled with his folk and settled amongst the Wiḥeydāt. Thereafter it happened that some of the women of Abū Khaḍra were robbed by the Wiḥeydāt on their way to Ramleh, and when they claimed compensation, insults were added to the injury. Abū Māsūḥ, incensed at this treatment of his kinsfolk, left his Wiḥeydī host, and returned to his own tribe, and Abū Khaḍra received him kindly, whereupon the old feud was settled by means of a covenant. They swore under the *ratma* tree that they would henceforth live together in amity, and that they would unite to seek revenge of the Wiḥeydī who had insulted their womenfolk. In due course they killed the Wiḥeydī.

At the present day there are two sections: Ratīmāt (or Artīmāt) of Abū-l-ʻAdūs and Ratīmāt al-Fuqarā, the latter being also known as Mashārifa. The former number about 500, and use a brand consisting of three *maṭāriq*; the latter, whose numbers are about the same, use the *bāb* and the *shāhid*.

The Sawārika

These people, like the Rawāwiʻa and the Walāyida, were formerly under the Duqūs, and became independent in 1929; they claim to be descended from ʻAkāsha, a famous companion of the Prophet, by virtue of which descent they are related to a number of other tribes of Sinai and Palestine, which trace their origin to Ziyād a son of ‘Akāsha. The Sawārika and their kinsfolk the Nanāyi‘a are represented in Beersheba district by some 500 tribesmen ; their brands are the *muṭraq* and the *shāhid*.

The Ḥasanāt Ibn Ṣabāḥ

These people are near kinsfolk of the Fuqarā, tracing their descent from Faqīr one of the four sons of Abū Jabala. There is no evidence of any connection with the Ḥasanāt section of the Tarābīn, and they neither have a common brand for their animals nor do they intermarry.

The Ḥasanāt Ibn Ṣabāḥ number little more than 200, and their brands are the *bāb* and the *shāhid*. Their shaykh Ḥāj Muḥammad Ibn Ṣabāḥ is famous for his knowledge of Bedouin custom ; the family to which he belongs have a great reputation for piety, and they are visited by the Bedouins for the sake of their *baraka*, and on account of their healing power.

The ‘Ammārīn of Ibn ‘Ajlān

Of these people it can be said with certainty that they are not of Jubārāt origin : they are the descendants of a certain ‘Abdullah who is buried at Ḥafā’ir Rakhma, and they have kinsmen in Transjordania. They number about 700, divided into four sub-clans, and their brand consists of two *muṭraqs*.

The Qalāzīn (*Jubārāt*)

According to their tradition these people are of the lineage of Ḥusayn : they assert that after their arrival in the Gaza area, whither they had migrated from the Ḥijāz, they elected as their shaykh a stranger named al-Wiḥeydī, whose personal qualities fitted him for the position : his rule was eminently successful, and eventually embraced the whole of the Jubārāt tribe.

The following story is current among the tribes : the Qalāzīn, like the other tribes, were entrusted by the Turkish authorities with the duty of conveying the stores required by the maḥmal of the Pilgrim Caravan from Gaza to Ma‘ān, and their shaykh was the responsible leader of the convoy : one year the Qalāzīn, without the connivance of their shaykh al-Wiḥeydī, fraudulently substituted millet for the rice they were carrying, and when the fraud was discovered at Ma‘ān the Turks held al-Wiḥeydī responsible and ill-treated him so that he nearly died. The shaykh, after being released, offered up a prayer of two prostrations and invoked a curse upon the Qalāzīn, because they had " blackened his face." His prayer was answered and most of the Qalāzīn perished in a conflagration.

All the Qalāzīn were formerly united as one tribe, but after the war of ʻAwda and ʻĀmir they split into two sections, one of which joined the Tiyāha, and the other the Jubārāt. The latter, at the present day, number about 400, and their brand is the *miḥjan.*

The Saʻādna

This section claims descent from Saʻd, a companion of the Prophet : they regard this ancestor as a saint, and hold an annual festival in his memory during which they sacrifice a female camel. They also have a tradition that Fāṭima al-Saʻdīya whose grave is at Mecca, was of their tribe.

As regards their origin, the Saʻādna are neither Jubārāt nor Tiyāha but rank as a separate tribe : it was during the war of ʻAwda and ʻĀmir that they split into two sections, one joining the Jubārāt and the other the Tiyāha. The Jubārāt-Saʻādna were attached to the Wiḥeydāt until 1929, when they complained of being oppressed by their Wiḥeydī shaykh and asked to be released from his rule. The author granted their request, and they were divided into two sections : Saʻādna of al-Nuwayrī, and Saʻādna of Abū Jireybān, each under its own shaykh.

The Saʻādna tell the story that, after their emigration from " Mecca," they came into conflict with the Balī at al-ʻAwja : the latter treacherously invited them to a feast, during which they fell upon the Saʻādna and killed every able-bodied man. Only an ancient named al-Muʻaymana escaped with his family to the ʻAraba where he found a refuge amongst the Jubārāt under Abū Jabala, since when Saʻādna and Jubārāt have lived together in amity. The Shiyāḥīn section of the Ṣukhūr in Transjordania are also of Saʻādna origin : they emigrated about fifty years ago on account of a blood-feud.

The Saʻādna number about 500, and their brand is the *jābiya.*

VI. *The Saʻīdiyīn*

The Saʻīdiyīn, who are divided into four sub-clans (Ḥamāyiṭa; Ramāmna; Madhākīr ; Rawāyiḍa), live in the

Wādī ʻAraba and, owing to the inhospitable nature of their country, they do not cultivate, but are stock-breeders pure and simple: moreover, owing to their proximity to Transjordania, they are obliged to be constantly on the alert in view of the raiding propensities of the Banī ʻAṭīya and other tribes. They have only recently come into contact with the Government, and do not appear to have paid any taxes before 1928: the only tax they pay is herd-tax.—They number about 1,000, and their brands are the *ʻāmūd*, the *muṭraq*, and the *shāhid*.

They tell the following story about their origin: Once upon a time a party of Sharīfs from the Ḥijāz were travelling to Egypt in order to receive the *ṣurra* (i.e. the payment made to the Arabs for safeguarding the pilgrim-route); on their way they stayed for a few days as the guests of the people of ʻAqaba and, when they departed, a boy of theirs named Ḥuweyṭ was left behind on account of illness. The boy's host, whose name was ʻAṭīya, desired to adopt him as his own, as he was intelligent and able to read and write: he therefore made a grave, on which he put the boy's clothes and which he marked with the tribal mark (*wasm*) of the Sharīfs, and when the party passed through ʻAqaba again on their return journey, they were told that Ḥuweyṭ was dead, a story which perforce they had to believe.

When Ḥuweyṭ grew up, he discovered the truth about his origin: he accordingly engraved the tribal mark of his own people (the Ḥuweyṭāt, sic!) on a stone, which he placed under the threshold of his reputed father's house.—After ʻAṭīya's death his sons disputed about the *ṣurra* paid by the pilgrims, and by means of the stone bearing his tribal mark, Ḥuweyṭ was able to prove that he alone was entitled to receive this payment: his claim was upheld, and the sons of ʻAṭīya were obliged to emigrate.[1]

Ḥuweyṭ married a daughter of ʻAṭīya and they had three sons, ʻAlwān (in another version Iqbāl), ʻUmrān, and Suweyʻid:

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[1] This story is full of inconsistencies which will not escape the reader: Ḥuweyṭ is the ancestor of the Ḥuweyṭāt, as it does not seem probable that there was a Ḥuweyṭāt tribal mark before that tribe had come into being: it is also not clear why a stone bearing that mark should have been accepted as evidence in the dispute about the *ṣurra*.—S.H.

all of these became the ancestors of tribes, which it is unnecessary to mention in this context: the Sa'īdiyīn, with whom we are here concerned, derive from Sa'īd, a son of Suwey'id, and a branch of theirs is found in al-Sharāh and Ma'ān: those with whom we are dealing, dwell, as has been said, in the Wādī 'Araba; and they are allies of the 'Azāzma and the Tarābīn. There is also a tribe of the same name in the district of Muzeyrīb, of whom it is said that they were called Sa'īdiyīn (Fortunate) because they participated in the building of the Ka'ba!

Formerly the Sa'īdiyīn were rich in flocks and herds, and no tribe was their equal in hospitality and generous dealing: but nowadays they are so impoverished that they are forced to eat the *samḥ* grain which grows wild in the wādīs: they have much decreased in numbers because of their poverty and on account of the fever which attacks the inhabitants of the low-lying areas known as *ghōr*.

They were at constant enmity with the Banī 'Aṭīya, the Ḥajāyā, and the Ṣukhūr, but in 1929 the governments of Palestine and Transjordania, made a formal peace between the warring tribes, since when there have been only trifling incidents.

They had famous warriors, such as 'Id Inkīz surnamed Muzawwij al-'Uzbān (he who provides wives for the unmarried), Suweyrī, the ancestor of the Ramāmna, and Ghannām, the ancestor of the Jabbārīn: they make pilgrimages to the grave of the last-named, and take oaths and make vows "by his head."

The Wādī 'Araba in which these people dwell deserves a note to itself. It extends to a length of no less than 200 kilometres, but varies greatly in width: in some places it is quite narrow, but it broadens out again quite unexpectedly. It forms the boundary between Palestine and Transjordania, but owing to the absence of landmarks, the traveller is unable to tell in which country he happens to be at any given moment. Although it contains no area fit for cultivation there are many place-names indicating wadis and plains and wells, and springs.

REVIEWS AND NOTICES

L'évolution religieuse d'Israël. Tome I : *La religion des Hébreux nomades.* By E. Dhorme. (Bruxelles, Nouvelle Société d'Editions, 1937.)

There has been no falling off in interest in the religious origins of Israel. It is easy to trace the gradual progress of Abraham's family towards a more purified monotheism, but the when and the how of this process cannot be determined with any great accuracy. This is not due to any real lack of information, but to the fact that the evidence gathered about the nomadic Hebrews is of an indirect character. In fact, we know the gesta of their forebears only through the medium of narratives by Jahvist and Elohist compilers and the developed theology of the sacerdotal writings. However Professor E. Dhorme deems that " under the strata of legend and religious interpretation of events it is still possible to discover a core of objective truth, concordant traits enabling us to reconstruct the conception which these tribes had of the earthly and heavenly worlds, of the human and the divine in their mutual interplay." The author's previous researches have fitted him for examining the question afresh. His former pupils will see how the diligent analysis of biblical texts, which formed the matter of his lectures, have now been put to good use in this book. Though he has written little about the literature of Ras Shamra, nevertheless he has paid close attention to the manifold evidence of religious texts which he himself was one of the first to decipher. He uses it here as one of the main documents on the religion of the west-Semites of the second millennium, without laying himself open to the charge of artificial harmonizing. So too, his knowledge of Assyro-Babylonian documents enabled him to advance with originality the theory of the chaldaean origin of the Hebrews. The Ras Shamra texts, far from weakening this theory, tend to strengthen it. If we except the localization of Kereth's adventures in the Negeb, the names of certain characters in the epic undoubtedly belong to the onomastic of the *Aramû* and *Kaldû* tribes, whose migrations gradually peopled the borders of the Syrian desert. It seems well established that the coming of the Hebrews in west-Semitic regions is closely linked with ethnical movements at the beginning of the second millennium. The author is unquestionably right in pointing out expurgated remnants of the cult of Sin-Nannar, patron god of Ur and Harrân, as shown by the preference for the lunar calendar, for the number seven, for the new moon and the sabbath in Israelite orthodoxy. Again, the Hebrews' propensity for bull-worship becomes strikingly clear if we remember how all the peoples of northern Syria favoured the god of thunder, Hadad-Baal, Teshub, whose thunder apparatus is present even in Jahvist theophanies.

After an exact description of the various peoples that were to be neighbours of the immigrants, the author tries to pick out the essential traits of their religious character, as shown in the narratives of Genesis, which should be taken " not so much as historic, but rather as psychological witnesses." This needs to be carefully understood, for the psychological witness belongs to history, forms its very substance, and is acceptable precisely for that reason. Besides, we know that the development of religious ideas has dimmed some aspects of the Patriarchs' religion and that elements of their cult, ill synthesized in a civilization that was coming to be, only left fleeting traces in the canonical writings. However, if we would go at all deeply, we must cling to the faintest clues and be thoroughly convinced that in these matters, mere survivals and suggestions, often have right of way over received doctrines. The author is a master at thus reading between the lines, and it is a real joy to follow him. He studies the main sanctuaries of the Patriarchs, the material elements which served as a basis for their piety and in which they dimly perceived the divine ; trees and sacred stones, holy heights, hallowed waters, sacred worship, persons and places. Père Lagrange in his *Études sur les Religions Sémitiques* had shown the way. With more copious sources, M. Dhorme can now get to grips with a subject that has become clear cut.

A few points of detail noted in our reading of these pages : M. Dhorme has carefully noted the passages where the name

Elohim, as a subject of a verb in the plural, stands for a true plurality. It is noteworthy that these traces of a still-born polytheism are to be found especially in the Jacob cycle. These same Elohim feature in the Abraham story of the Elohist version, Gen. xx, 13. Might these not be traces of a literary corpus of the high place of Bethel, the gesta that were told to pilgrim visitors ?

We agree with the author in seeing in the narrative of Isaac's sacrifice an aetiological explanation of the substitution of an animal victim for the first born. M. Dhorme's impressive parallels enable us to dispense with seeking for some clumsy rendering of the Hebrew *karath berith*, foedus icere.

The author is reserved about the origins of the Levites ; perhaps he might have stressed with advantage the difference in tone between the blessings of Jacob, Gen. xlix, 5–7, and the oracles of Moses, Deut. xxxiii, 8–11, which refer to the tribe of Levi and its dispersion in the territory of Israel.

We find it hard to agree with him in his etymology of the Hebrew *shabbath*. Surely it is too much to see here a mere transcription of the accadian *shapattum*, however much the observances resemble each other. The verb *shabath*, often used in the *qal* in the sense of *finishing*, *stopping completely*, *being no longer*, has every air of being a primary verb and there is no need to see in it a denominative.

The last chapters treat of the various conceptions of the divine and of the names of God. Some may think these too schematized. In proportion as a tribe became attached to the soil, the notion of its parent gods apparently developed into a baalism, a religion of the local deities. The idea of God and his attributes is thrown more and more into relief as a result of this interested veneration. From that time on, doctrinal Jahvism absorbed the old religion of the nomadic Hebrews. However, on going through the last chapters, our impression is that the succession of forms traced by M. Dhorme is excessively heterogeneous ; in his mind it may be less so. As a matter of fact, the attributes of *El* already indicate a certain sublimation of the god of heights. Old as it was, this spiritualization was embodied in the theological synthesis of Jahvism. No doubt, *Shaddaï* is etymologically a *god of mountains*, accadian *shadê* ; but the meaning is considerably extended :

the blessings of *Shaddaï* call upon the source of all fruitfulness. Again, the title *El-'Olam*, *Melekh-'Olam*, acquired a very great vogue throughout the East. This *God of Eternity*, or *God of the Universe*, becomes the *Mâr 'almâ* of nabataean texts and the *Rab ul-'Alamîn* of the Koran. M. Dhorme's work is the first of a series. The quality of this work is an earnest of the succeeding volumes which we await eagerly.

A. GEORGES BARROIS.

The Stone Age of Mount Carmel : Excavations at the Wady el Mughara. By D. A. E. GARROD and D. M. A. BATE. Vol i. (Oxford University Press, £2 2*s*.)

Palestine, before our eyes, is acquiring one more aspect of importance, in addition to the many with which she is already endowed. In geology, and in the various branches of natural history, her place has for long been securely established. In ethnology and in political history—ancient and modern—she has had a part to play enormously out of proportion to her size and wealth. In religious history her position is, and throughout all time will remain, unique. True, in aesthetics she drops into the background : but on the other hand, in what it is now the regrettable fashion to call " Prehistory," she is stepping rapidly into the foremost rank.

When Père Zumoffen, at the end of the nineteenth century, before cave-digging had become the exact science which it is now, unearthed some Palaeolithic implements in certain Syrian caves : when my father, walking with me, one day in 1902, across the plain from Gezer to Ramleh, picked up an Acheulean hand-axe by the wayside : no one could have had any anticipation of the treasures which the Palestinian caves were destined to yield to careful and laborious research. The sumptuous volume before us, stuffed so tightly with facts that a reviewer may well despair of dealing with it, is based on intensive work done in three caves in a valley near Mount Carmel. One who has had some experience of the wealth of Palestine in caves almost shudders, as he sees in his mind's eye the prospect of a vast library full of similar volumes, with which a lifetime would be insufficient adequately to deal.

The layers of stratification on the floors of these caves record occupations extending from the Middle Palaeolithic to the Bronze Age, with some later intrusions. Each layer is here described in turn, and the rich and bewildering store of relics recovered is classified, described, and illustrated with photographs or outline drawings. It is difficult to see how this record could be bettered. The yield of the caves includes osteological materials (human and animal) ; flint implements in a vast variety of types ; beads of shell ; prickers, pins, pendants, and similar paraphernalia in bone ; and one or two trivial works of Palaeolithic art.

The rock-basins, overlaid by a layer of neolithic deposit, offer a welcome contribution to this fascinating but perplexing problem of Palestinology.

While it has nothing to do directly with the main subject of the book, it would have been advantageous to get some competent Arabist to touch up the place-names a little—a criticism which applies to many works of this kind, *mutatis mutandis*. The caves are situated in a valley called *Wadi el-Mugharah* " The valley of the Cave "—not " of the Caves " as it is translated on p. 3—and it is a solecism to prefix " the " to this name, as is done in the title of the book. One of the caves is called " es-Skhul," which is an impossibility, for no Arabic word can begin with two consonants. A vowel, however slight, divides them, and we must write *es-Sŭkhūl*. I do not remember ever hearing " Wadi en-Natūf " mentioned by a native of the country, but I should expect it to have a doubled *t* : in which case the adjective borrowed from it ought to be " Nattūfian." And should not " Atlitian " be " Athlitian " ?

In any case, it is high time to protest against the accumulation of this essentially unscientific terminology—naming a culture or a style of implement from the place where, by mere chance, typical examples first came to light. It would now be difficult to dislodge such well-established words as Chellean, Mousterian, and the like ; but they are misleading, and their multiplication is to be deprecated.

A section on Palaeontology ends the book : we learn that among the rewards of the work there was a fine bag of new species, the characters of which are carefully described by Miss D. M. A. Bate. But some of the names chosen for these strangers give one pause. There are few persons in all history more worthy of sympathy than Xanthippe : though a high honour, it must have been a nerve-racking job to be the wife of Socrates ; and it really is not kind to make her the godmother of a new species of shrew—nor is it kind to suggest that the poor little animal is *that* sort of shrew ! (From an inserted slip we learn that Miss Bate has since been obliged to relieve Xanthippe of the duty imposed upon her, but only because she found that someone else had already pre-empted the lady in the interests of *his* new shrew : we wonder what Socrates would have thought of the competition.) And is it right, even on mere chronological grounds, to call a Palaeolithic pig from Western Palestine *Sus gadarensis* ? Surely that name was pre-empted also !

The book before us bears the words " Volume I." This implies that at least one more volume will follow, where we shall presumably find, *inter alia*, an account of the human osteology, with analytical tables of the racial characters displayed, and details of pathological or other abnormalities, if any. Thus will the record of an admirable and illuminating excavation be rounded off.

R.A.S.M.

Dr. Cecil Roth's book, *The Jewish Contribution to Civilization* (MacMillan, 7*s*. 6*d*.), should perform a very valuable function in the controversy that is unfortunately raging, and by no means in the literary world only, around the value of the Jewish people to humanity and civilization. Many people have known vaguely of the prominent part taken by Jews in many walks in life but their knowledge has been almost casual. Dr. Cecil Roth has been preceded by the Anglo-Jewish scholar Joseph Jacobs who spent his last years in the United States, in his *Jewish Contributions to Civilization* which was however incomplete at the time of his death and moreover was never published in the ordinary manner. More recently Bevan and Singer's *The Legacy of Israel* has gone very thoroughly into one of the regions of Jewish intellectual activity and Laurie Magnus's *The Jews in the Christian Era* has also covered a part of the field. There have also been one or two books dealing solely with the services of the Jews to Germany. Dr. Roth, of course, also deals with the last mentioned aspect but only as part of a greater subject. The facts described in plain and sober language by Dr. Roth relating to the services of Jews to Germany make one wonder not only at the ingratitude but at the folly of the present rulers of Germany. The Reich may once again be in need of German Jewish assistance and, judging by the past, would suffer severely for lack of it. As a measure of the Jewish contribution to German intellectual life it may be mentioned that nine of the Nobel German prize-winners were full Jews and four others had one Jewish parent. (Dr. Roth mentions only one of the latter.) These thirteen Jews and half-Jews who shed lustre on the German name are included in the total of thirty-eight Germans to whom the Nobel Prize has been awarded. And before the present expulsion of the Jews from Germany commenced the Jewish population counted about 600,000 out of a total of sixty-six millions.

A. M. H.

Opgravingen in Palestina tot aan de Ballingschap. Door Dr. J. Simons, S.J. (J. J. Romen & Zonen, Roermond-Maaseik.) 1936. Price not stated.

This volume is one of a series of " Bijbelsche Monographieën " intended primarily for Roman Catholic students. But this volume which is excellently printed and profusely illustrated deserves a wider audience.

The author is known to readers of the Quarterly for his contributions to Egyptological and archaeological subjects. He has been associated with the excavations carried out in Transjordania by the Pontifical Biblical Institute at Rome. In the eleven chapters of this book he summarizes his learning and experience in a survey of the history, methods and results of excavation in Palestine. There is perhaps nothing very original in the book except the plan of it. The book will, we think, be warmly welcomed by those students who wish to have a readable and objective account of the excavations and of their importance for Old Testament study. The respectful but critical appreciation of theories put forward as " results " by leading archaeologists, is fair and helpful. An English translation is in preparation.

T. Fish.

The Committee have to acknowledge with thanks the following :

The Antiquaries Journal, January, 1938. Excavations at Tal Atchana, 1937, by Sir Leonard Wolley.

The Expository Times, January–March. Recent Biblical Archaeology, by J. W. Jack (March).

Great Britain and the Near East, January–March, 1938.

The Journal of the Royal Anthropological Institute, January–June, 1938.

The Journal of the Royal Society of Antiquaries of Ireland, December, 1937.

The New Judaea, January. 1938.

Religions, October, 1937.

The Scottish Geographical Magazine, January, 1938.

American Journal of Archaeology, October–December, 1937.

The American Journal of Semitic Languages and Literature, January, 1938. A Chapter in the History of the High-Priesthood, by J. Morgenstern.

Bulletin of the American Schools of Oriental Research, December, 1937. Mesopotamian Miscellanies, by E. Speiser ; Further Light on the History of Israel from Lachish and Megiddo, by W. F. Albright.

Bulletin of the Metropolitan Museum of Art, November–December, 1937.

The Geographical Review, January, 1938. The Mediterranean Problem, by Gordon East.

The Jewish Quarterly Review, January, 1938. The Language of the Pentateuch in its Relation to Egyptian, by H. S. Gehman.

Journal of the American Oriental Society, December, 1937. Some Determining Factors in the Northward Progress of Levi, by L. Waterman ; A New Phoenician Grammar, by C. C. Torrey.

Journal Asiatique, January–March, 1937. Le poème de Keret et l'histoire, by R. Weill.

Nouvelle Revue Théologique, January–February, 1937.

Revue Biblique, January, 1938. Nouvelles recherches dans la région de Cadès, by R. de Vaux.

Orientalistische Literaturzeitung, January–March, 1938. Review of S. A. Cook : The Old Testament, by H. W.

Hertzberg; R. Campbell Thompson: A Dictionary of Assyrian Chemistry and Geology, by W. von Soden.

Zeitschrift des Deutschen Palästina-Vereins, Bd. 60, hft. 4, 1937. Die Wege der Pharaonenheere in Palästina und Syrien, by D. M. Noth.

Biblica, Vol. 19, fasc. 1, 1938. Linguistic and Textual Problems: Ezekiel (1), by G. R. Driver.

Bible Lands, January, 1938.

Bulletin of the Jewish Palestine Exploration Society, October, 1937. The Second Campaign of Excavations at Beth Shearim, 1937, by B. Maisler.

Al-Mashriq, July–September, 1937.

The Story of the Bible, pts. 1–3.

The Quarterly of the Department of Antiquities in Palestine, Vol. vi, 3–4.

Transactions of the Royal Canadian Institute, October, 1937.

Proceedings of the Royal Canadian Institute, 1937.

Przeglad Biblijny, Vol. 1–2.

Die Palästina-literatur, bd. v, lief. 3. (Literature of the years 1925–34), by P. Thomsen.

Journal of Transactions of the Victoria Institute, 1937.

Handbuch zum Alten Testament, lief. 2. Das Buch Josua, by M. Noth.

Supplementum Epigraphicum Graecum, Vol. viii, fasc. 1, Palestine.

The Haverford Symposium on Archaeology and the Bible, 1938.

TRANSLITERATION OF HEBREW AND ARABIC CONSONANTS

HEBREW

Hebrew	English		Hebrew	English	
א	’		כ	k̲h̲	
בּ	b		ל	l	
ב	b̲h̲		מ	m	
גּ	g		נ	n	
ג	g̲h̲		ס	s	
דּ	d		ע	‘	
ד	d̲h̲		פּ	p	
ה	h		פ	f	
ו	v, w		צ	z̲	
ז	z		ק	k̲	
ח	h̲		ר	r	
ט	t̲		שׁ	s̲h̲	
י	y		שׂ	s̲	
כּ	k		תּ	t	
			ת	t̲h̲	

ARABIC

Arabic	English		Arabic	English	
ا	’		ض	d̲	
ب	b		ط	t̲	
ت	t		ظ	t̲z̲	
ث	t̲h̲		ع	‘	
ج	g	or j in Syrian Arabic.	غ	g̲h̲	
ح	h̲		ف	f	
خ	k̲h̲		ق	k̲	
د	d		ك	k	
ذ	d̲h̲		ل	l	
ر	r		م	m	
ز	z		ن	n	
س	s		ه	h	
ش	s̲h̲		و	w	
ص	z̲		ي	y	

Long vowels marked thus :—ā, ē, ī, ō, ū

PALESTINE EXPLORATION QUARTERLY, JULY, 1938

THE
PALESTINE EXPLORATION FUND

NOTES AND NEWS

Summer Closing.—The office and rooms of the Palestine Exploration Fund will be closed from Monday, 8th August, re-opening Thursday, 8th September.

THE ANNUAL GENERAL MEETING OF THE PALESTINE EXPLORATION FUND took place on 14th June. A full report of the proceedings appears on page 147.

THE WELLCOME MARSTON ARCHAEOLOGICAL RESEARCH EXPEDITION TO THE NEAR EAST is holding its Annual *Exhibition of Antiquities from Lachish* at the Wellcome Research Institute, 183–193 Euston Road, N.W.1 (by kind permission of the Trustees of the late Sir Henry Wellcome), from 7th to 29th July, on week-days from 11 a.m. to 5 p.m. The film is shown at 11.30 a.m. and 3 p.m. daily. The exhibition will remain open on the evenings of 22nd and 28th July, when the film will be shown at 7 p.m. There will be *Lectures on Recent Discoveries* on : Monday, 11th July, at 3 p.m., Tuesday, 19th July, at 5.30 p.m., and Wednesday, 27th July, at 6 p.m.

THE EGYPT EXPLORATION SOCIETY'S *Exhibition of Recent Work* is being held in the rooms of the P.E.F. from 23rd June to 14th July and deals with the Society's expedition in the Sudan at the sites of Sesebi and Amarah West.

Canon J. E. Hanauer, who died in his home in Jerusalem on 15th June, was born in Damascus, of mixed Swiss and Jewish parentage. Entering the Church early in life, he was for many years a canon of St. George's Cathedral in Jerusalem, in which city he was well known in European circles for almost two generations. From as early as 1881 he was a frequent and much appreciated contributor to these columns although the interruption caused by the World War was followed by an appreciable reduction in the number of his contributions after its end. Although he was obviously an old man, many of his numerous friends and acquaintances were surprised to learn that he was as old as eighty-eight, so active was he in his work until almost his last year.

By the death of Père Lagrange at the ripe age of eighty-four France loses a scholar and an archaeologist of the highest distinction. He received his early training as a lawyer, but abandoned his legal career to enter the Dominican order. His enduring monument is the Dominican Biblical School in Jerusalem, commonly known as the École Biblique et Archéologique Française. Here he trained and inspired a distinguished group of biblical scholars and archaeologists, among whom are the well-known names of Vincent, Abel, Dhorme, Barrois, de Vaux, and many others. An early book, *le Messianisme chez les Juifs*, is still a classic in its subject, and his *Études sur les Religions Sémitiques* is in French what Robertson Smith's *Religion of the Semites* is for English students. His memory is blessed.

The regretted death of the Italian archaeologist Count Costantini has brought about the cessation of the well-known publication for which he was principally responsible, the *Bollettino dell 'Associazione Internazionale Studi Mediterranei*. It is announced that a limited number of complete sets at 250 *lire*, yearly volumes at 50 *lire*, and separate parts at 10 lire *each*, are available, and may be obtained from l'Istituto Italiano di Paleontologia Umana, via del Proconsolo 12, Florence.

The long-awaited publication of the Lachish Letters is at last an accomplished fact. The splendid volume in which these valuable documents may now be studied by all those who are interested in any fresh light thrown by archaeology on biblical matters, is as perfect as the Oxford Press can make it. Scholars have already begun to attack the problems raised by the Letters, and in an important article contained in this issue Dr. J. W. Jack, whose monograph on the Ras Shamra Tablets is well known, discusses at length several of the points at issue. Whatever may be debatable as to matters of interpretation, there can be no doubt of the immense care and labour which the joint authors have bestowed upon their several assignments, and of the great debt under which they have placed all biblical students. There is a melancholy satisfaction in reflecting that there could be no nobler monument to the memory of the distinguished archaeologist of whose devoted labours this volume is the first fruits.

It is a matter of interest to learn that Sir Leonard Woolley's excavations at Tell Atchana have revealed links with Ras Shamra. In some cuneiform tablets discovered at Tell Atchana, and now in course of translation by Mr. Sidney Smith, occurs the name of the mysterious *Nqmd*, a name which has already engaged the attention and speculation of students of the Ras Shamra tablets.

In the April issue of the *Expository Times*, Mr. Alan Rowe discusses his discovery of alphabetic writing on Egyptian scarabs and seals. By reading apparently meaningless groups of hieroglyphic signs on the acrophonic principle Mr. Rowe says that he was immediately able to " read quite easily many of the hitherto puzzling groups of mixed signs on the scarabs and seals, dating from the end of the XVIIIth Dynasty to the Ptolemaic Era." Mr. Rowe goes on to suggest that this system of hieroglyphic writing on scarabs was expressly devised to conceal the names of gods. He goes on to suggest that this discovery should be applied to the decipherment of the Sinaitic texts which still remain to a great extent an unsolved problem. Reference may here be made to a valuable article by Prof. W. F. Albright in the April issue of the *Jewish Quarterly Review*, on The Proto-Sinaitic Inscriptions.

Students of the rapidly increasing material from Ras Shamra are beginning to fall into two camps, like Swift's Big-endians and Little-endians, on the question of the South Palestinian, or " Negebite," origin of the culture and traditions of Ugarit. The question arises most acutely in the long and very difficult text published by Virolleaud under the title of *La Légende de Kéret, Roi des Sidoniens*." Professor Albright, with customary vigour, wields a trenchant pen against the "Negebites," and finds support in a very able article in the January issue of the *Revue Biblique* by R. P. R. de Vaux. An equally able article by that distinguished Egyptologist, Raymond Weill, in the *Journal Asiatique*, January–March, 1937, supports Dussaud's views, and the trouble is that the text seems capable of manifold manipulation to suit the views of either party. The point is of considerable importance because of its bearing on the Hebrew traditions of the wanderings of the Patriarchs in Canaan. It becomes increasingly clear that many years of careful linguistic study of these texts will be required before they can be safely used as historical sources.

In the *Quarterly Statement* for October, 1936, reference was made to a paper read by Mr. J. H. Iliffe, Keeper of the Palestine Archaeological Museum, at the Leeds Conference of the Museums Association in July, 1936, on the subject of "A Folk Museum for Palestine." During the last two years much progress has been made towards the establishment of a Folk Museum in Jerusalem and the nucleus of a collection, consisting of some 900 objects, has been formed. These are at present housed in two rooms in the Old City near to the Church of the Holy Sepulchre but space there is limited and it is hoped that more adequate and better situated accommodation may soon be found. The collection comprises pottery, basketwork, jewellery, rugs, saddlery and occupational tools and also some fifty representative costumes from various parts of Palestine.

The Museum is supported entirely by voluntary contributions and funds are urgently needed to continue the work, the first requirement being the provision of a salary for a curator. The traditional clothes and tools of Palestine are quickly being supplanted by imported substitutes and the purpose of the Museum must be achieved in the next few years, or not at all. To ensure the Museum a regular income an "Association of the Palestine Folk Museum" has been formed with a minimum annual subscription of 5*s*. and a minimum Life Membership fee of £3. Contributions should be sent to the Honorary Secretary, Mrs. Violet Barbour, P.O. Box 4040, Jerusalem.

LECTURES. Col. F. J. Salmon, late Commissioner for Lands and Surveys, Government of Palestine, has promised to open the 1938–39 session of P.E.F. lectures with a lecture on the recently compiled map of *Palestine of the Crusades.* The date of this and other lectures will be announced in due course.

The list of additions to the Library of the British School of Archaeology in Jerusalem which was printed on p. 67 of the *Quarterly* for January, 1938, was for the first half of 1937 only, and not for the full year. The following additions were made during the second half-year :

Der Alte Orient : Vol. 35, Nos. 3 and 4 ; Vol. 36, Nos. 1–2 and 3–4 ; Vol. 37, Nos. 1–2. Also Ergänzungsbände 1 and 2.
Annual of the American Schools of Oriental Research : Vol. 16.
Antiquity : Vol. 11, Nos. 43 and 44.
British Museum Quarterly : Vol. 11, Nos. 3 and 4.
Bulletin of the American Institute for Persian (Iranian) Art and Archaeology : Indexes to Vols. 1–4. Vol. 5, No. 1.
Bulletin of the American Schools of Oriental Research : No. 67.
Bulletin of the Jewish Palestine Exploration Society : Vol. 5, Nos. 1–2.
Bulletin of the Metropolitan Museum of Art : Vol. 32, Nos. 6–11 with Section 2 of No. 10.
General Monthly Bulletin of Current Statistics of Palestine : Vol. 2, Nos. 6–11.
Göttingische Gelehrte Anzeigen : Vol. 199, Nos. 1, 2–3, 4 and 5.
Journal of Egpytian Archaeology : Vol. 23, No. 1.
Journal of Hellenic Studies : Vol. 57, No. 1.
Journal of the Palestine Oriental Society : Vol. 17, No. 2.
Journal of Roman Studies : Vol. 25, No. 2 ; Vol. 26, No. 2 ; Vol. 27, No. 1.
Journal of the Royal Asiatic Society : 1937, Nos. 3 and 4.
Kirjath Sepher : Vol. 14, Nos. 2 and 3.
Morgenland : No. 29.
Museum Journal of the University of Pennsylvania : Vol. 22, No. 2.
Palestine Exploration Quarterly : 1937, July and October.
Quarterly of the Department of Antiquities in Palestine : Vol. 5, Title-page and Contents ; Vol. 6, Nos. 3–4.

Revue Biblique : Vol. 46, Nos. 3 and 4. Also Vol. 1, Nos. 1, 2 and 3 : Vol. 2, Nos. 2, 3 and 4 ; Vol. 3, No. 1 ; Vol. 6, No. 2 ; and Tables générales for Vols. 6, 7 and 15.

Syria : Vol. 18, Nos. 1, 2 and 3.

Syro-Egypt : No. 2.

Zeitschrift Der Deutschen Morgenländischen Gesellschaft : Vol. 16, No. 2.

SEVENTY-THIRD ANNUAL GENERAL MEETING

Tuesday, 14th June, 1938

PROFESSOR JOHN L. MYRES, O.B.E., D.Sc., D.Litt., *in the Chair*

THE Seventy-third Annual General Meeting of the Palestine Exploration Fund was held at 2 Hinde Street, Manchester Square, London, W.1, on Tuesday, 14th June, 1938. Professor John L. Myres, O.B.E., D.Sc., D.Litt., presided and a number of members and interested friends of the Fund attended to hear a lecture by Mr. William Harvey (Architectural Adviser to the Palestine Government), and his son, Mr. John Harvey, on the structural decay of the Church of the Holy Sepulchre, Jerusalem.

Apologies for absence were announced from The Right Rev. the Bishop of Portsmouth, Sir George Adam Smith, Sir Charles Marston, Professor J. Garstang, Colonel Stewart F. Newcombe, Professor S. H. Hooke, the Rev. C. B. Mortlock (Hon. Secretary), Mr. Sidney Smith and the Rev. Canon Danby.

DR. E. W. G. MASTERMAN (Deputy Secretary) read the Minutes of the Seventy-second Annual Meeting and these were confirmed and signed as correct.

Report and Accounts

COLONEL SIR CHARLES F. CLOSE (Chairman of the Executive Committee), in moving the adoption of the Annual Report and Accounts which, having been circulated, were taken as read, said :

Professor Myres and members of the Palestine Exploration Fund, I beg to move the adoption of the Annual Report and Accounts for 1937. These have been printed and distributed to subscribers, and you will, no doubt, as usual, wish them to be taken as read.

It is a melancholy reflection that, at this time last year, at our Annual General Meeting, we were privileged to listen to an admirable address by Mr. J. L. Starkey, on the excavations at Lachish. Now, his voice is stilled for ever. By his brutal murder on 10th January we have lost a good friend and the world of science an accomplished archaeologist.

It is well known to all of us that the disturbed condition of Palestine prevents the systematic prosecution of the Archaeological Survey of that country, which was intended to be our main occupation for some years. We may hope that eventually it may be possible to carry out this work as originally intended. Meanwhile we can make use of our enforced leisure in Palestine, by spending the money which would have been expended upon the Survey, nearer home. We can, for instance, make a larger contribution towards the cost of the volumes describing the results of the joint excavations at Samaria. These volumes are now being written and prepared by Mr. Crowfoot, and it is understood that the first of these volumes will appear at no very distant date.

It has been mentioned in the Annual Report that arrangements are being made to spend a great part of the legacy bequeathed by Lady Watson on the purchase of a modern museum case. An inscription will be affixed to the case to the effect that the case is dedicated to the memory of Sir Charles and Lady Watson and of their services to the Fund during a long period of years.

It is understood that Col. F. J. Salmon has retired from the post of Commissioner of Lands and Surveys of Palestine. Whilst he held those positions he materially improved the modern maps of Palestine, was in close touch with us on the question of the Archaeological Survey, and we hope that we may still have the benefit of his advice during his retirement. The Map of Palestine of the Crusades, issued by his Department, was accompanied by an historical Memoir, written by Mr. C. N. Johns. The Map and Memoir have been received with a chorus of praise and deserve the attention of all who are interested in the history of Palestine.

Sir Robert L. Mond (Hon. Treasurer), in seconding, referred to the great sense of loss all present undoubtedly felt as a result of the unfortunate death of Mr. J. L. Starkey in January last, the best memorial to whom would be a steady continuation of the fruitful work he had been able to do while in Palestine.

The Report and Accounts were then unanimously adopted.

Election of Executive Committee

On the motion of MR. W. C. EDWARDS, seconded by MR. B. C. WIDDOWSON the Executive Committee was unanimously re-elected with the addition of the name of Col. F. J. Salmon.

Appointment of Auditors

On the motion of COLONEL SIR CHARLES CLOSE seconded by DR. E. W. G. MASTERMAN, Messrs Turquand Youngs, McAuliffe & Co., Chartered Accountants, were re-appointed as Auditors for 1938.

Chairman's Address

THE CHAIRMAN then said : It is a great pleasure and honour to occupy the Chair at the Seventy-third Annual Meeting of this Fund, which is among the senior of the learned societies which have devoted themselves to the history and monuments of Palestine. I am sure you will agree that the Fund has a most remarkable and distinguished career and has contributed in a very real degree to our present understanding of Palestine and its long history. I only need mention a few of the principal contributions to knowledge resulting from the activities of the Fund : the great Survey of Western Palestine, the first scientific map of the country, and the popularization of that map by means of the raised map of Palestine shown on the wall here. That map was prepared by one of the Fund's most devoted servants, Mr. George Armstrong, whom I remember working quietly in the back room of the then very small offices of the Fund with sections of that monumental map on the table before him ; working with meticulous care, picking the brains of every traveller who returned from Palestine as to whether this or that, looked at from somewhere near the edge of the table, appeared as it should ; collecting photographs and holding them up in order to see whether he had the sky-line quite right, and so on. Moreover, he worked out, in conference with anyone who appeared likely to be useful, a colour-scheme which would give, in scientific imagination, a picture of Palestine from the air. Now we have other ways of looking at Palestine from the air beside Mr. George Armstrong's map, but I am bound to say it seems to stand the test of such criticism remarkably well. It has been of the greatest possible use in the study and the teaching of Palestinian geography and history.

Then there are the excavations carried on by the Fund, of which the record is to be found in the volumes by Dr. Bliss and Professor Macalister and, subsequently, in the *Annual Memoirs* which for a while the Fund continued to produce.

Next we come to what has already been mentioned this afternoon, the co-operation between the Fund and the British Academy, Harvard University, the British School of Archaeology in Jerusalem, and the Hebrew University, in the systematic exploration and excavation of Samaria. Accounts of the progress of that work have been given to us from time to time by Mr. Crowfoot who was in charge of the work and whom we are glad to see with us on this occasion. We are glad to hear that arrangements are in progress for the preparation of a definitive *Report*, to which we look forward with the greatest interest.

Mention has also been made of the Archaeological Survey of Palestine. In spite of difficulties, even dangers, the work has been going on as opportunity offered, on the one hand on the Jaffa sheet covering the neighbourhood of Jaffa and Tel Aviv by Mr. P. L. O. Guy and Mr. Bellerby and, on the other, far away in the south by members of the Colt Archaeological Expedition to Esbeita and other sites; particularly by a student of the British School of Archaeology who has been working for the Colt Expedition and for the Survey, Mr. G. E. Kirk. We hope he will be able to carry on, because his preliminary reports of his doings give one a most appetizing account of the material to be found in parts of the country, now almost totally deserted, on ancient sites of various periods. During the last two years there has been indication of what we must now be on the look out for—I will not say we expect or hope to get it—for you will remember that El Auja away in the south is one of the very few places outside Egypt where conditions have been favourable for preservation of papyrus documents. The El Auja papyri, now being worked up by Professor Kayser in New York, are of exceptional value as illustrating conditions in this remote corner of the civilized world, between the surviving Christian communities and the new Saracen conquerors and their nascent administration.

The recovery of buildings already destroyed is one aspect of the work of the Fund. Another, with which we are to-day more particularly concerned, is the recording of what exists, above ground, and co-operation with whatever bodies are more directly and immediately concerned, in the conservation and preservation of the surviving monuments. We are here this afternoon to listen to an account by Mr. William Harvey of the structural decay of the Church of the Holy Sepulchre at Jerusalem, the arresting of which owes so much to his technical skill and the wise measures taken by him. Mr. Harvey asks me to say that the communication will be in two parts, the first read by his son, Mr. John Harvey, following which Mr. Harvey himself will add a few words on particular points to which he wishes to draw attention.

Lecture : The Structural Decay of the Church of the Holy Sepulchre, Jerusalem. This paper appears on page 156.

THE CHAIRMAN : I think you will realize, ladies and gentlemen, that the subject discussed by Mr. William Harvey and his son is a very important and serious one. There are probably others present who know the building and appreciate as only eye-witnesses can the dangers to which it is exposed and the value of the precautions taken during the past few years. Mr. Crowfoot has seen the building recently. Perhaps he will be good enough to add a word or two.

MR. J. W. CROWFOOT : We have all, I am sure, listened with the greatest interest to what has been said and I feel convinced that everyone present will be most anxious that some steps should be taken to save this building before it is too late. Mr. Harvey has succeeded in preventing any loss of life there but if we lose that building, we lose a building which is wrapped up with the history of Western Christendom: it was to save the Holy Sepulchre that the Crusaders left this country, and the building we have heard about is their chief monument. Mr. Harvey has done his share. He has pointed out to the Government what ought to be done.[1] If anyone can carry the matter any further, let him do so. I can only add my personal thanks for all Mr. Harvey has told us.

DR. E. W. G. MASTERMAN, who had also recently seen the building, said: Looking at the Church of the Holy Sepulchre more or less as a tourist does, I can only say it is in a deplorable state. I hope that, in the interest of Christendom, no time will be lost in saving a building of such unique interest as to appeal to everybody, whatever his or her views as to the genuineness of the site. I was interested to hear an authoritative statement from Mr. Harvey that it was entirely on account of his report that the crowds during Easter time were excluded from the Church of the Holy Sepulchre. It is perfectly evident from what he says that it was the security of the public and not the political situation, as gossip has it, which caused the very great disappointment felt by many pilgrims to the spot, people who had booked their passages to go to the Easter celebrations and were at the last moment turned away. I endorse what Mr. Crowfoot has said and hope that no time will be lost, not only because every moment is of serious import, but also because all Christendom is looking to the British to do something in the matter as a mandatory power. I hope no dispute as to who is to take action will keep the British Government from acting without delay, regardless of depending upon outside contributions in money which may take a long time to obtain.

MR. HUMPHREY BOWMAN, C.M.G., C.B.E. (late Director of Education in Palestine): I should like to say, speaking as a former resident in Palestine over a lengthy period and as one who has only recently retired from the service, that the Church of the Holy Sepulchre is to those who live in Jerusalem something most precious, and to those of us who do not any longer live there, and even to those who have never lived in Jerusalem, something just as precious; it is, indeed, a monument precious to all Christians, British and others, especially to those who bear in mind, as Mr. Crowfoot has said, the reason for the Crusades.

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[1] Mr. Harvey's published recommendations fall into two divisions, the steps which are absolutely necessary to save the present building, and those which are desirable to restore it to some measure of its former beauty. A committee should be appointed to examine the latter. It is difficult to understand why there should be delay about this. It will be much easier to collect the necessary funds when a programme of the work can be put forward.

Mr. Harvey has explained in clear and telling language the imminence of the danger in which the Church of the Holy Sepulchre is at present. In this connection we should not forget the name of Ernest Richmond, who as Director of the Department of Antiquities in Palestine was, in the first place, responsible for bringing Mr. Harvey out to Jerusalem. If it had not been for the foresight of Mr. Ernest Richmond I doubt whether Mr. Harvey would have come out to Palestine, and there is little doubt in the minds of those who know the facts that if he had not come out in 1934 the Church of the Holy Sepulchre might by now have been a ruin. He has saved it for the time being. I remember, when he and I met in Jerusalem in 1934, that he told me he had saved the church for two years, and for no longer. In 1938, four years later, the Church of the Holy Sepulchre is still standing, but since Mr. Harvey's more recent visit it is clearer than ever that the church may not remain standing much longer unless it is repaired and put into a solid and lasting state which will carry it on for at least another hundred years.

I do not know whether those present here are aware of the immense difficulties involved in the accumulation of funds for the purpose of repairing the structure. The Greek Orthodox Church hold themselves responsible for the Holy Sepulchre, the Latin Church in Jerusalem also hold themselves responsible, and the Armenians, the Copts, the Syrians and the Abyssinians have, as they think, an equal claim to responsibility. Almost the only Church in Christendom, so far as I know, which has no claim on it is the Anglican Church, the Established Church of England. That may appear remarkable as it is, nominally at any rate, the Church to which the British mandatory power is attached. Thus the British Government, though not perhaps the Palestine Government, is in a peculiarly impartial position, because the British Government is the only government which is in any way attached to a branch of the Christian Church that has no claims on the Church of the Holy Sepulchre. There are, however, difficulties so numerous that it would be impossible to go into them now. But I am afraid that unless steps are taken by the British Government, and unless the Government face those difficulties, the funds will not be forthcoming. I am not sure what Mr. Harvey estimates to be the amount required, but a few years ago I believe it was put at something like £200,000 or £300,000 ; call it for the sake of argument half-a-million. If the amount needed is less, so much the better, but in any case it is a large sum that will have to be raised in Christendom, and the question is whether the British Government is to-day in a position to call for those funds from Christians all over the world. There is little doubt in my mind, as I feel sure in yours, that if Italy had been the mandatory power for Palestine the Church of the Holy Sepulchre would have been put into a perfectly sound state in the early years of the mandatory system which began in 1920. At any rate the danger would not have been allowed to continue and to increase until 1938. The Holy Sepulchre is one of the world's most famous monuments, and it is our duty to see that it is preserved.

COLONEL SIR CHARLES CLOSE asked was the church being left with the iron bands round it, keeping it together, or was anything else being done, and Mr. WILLIAM HARVEY replied that so far as he knew nothing more had yet been done.

VOTE OF THANKS

COLONEL SIR CHARLES CLOSE then proposed a very hearty vote of thanks, in the first place, to Professor Myres for presiding and for his admirable address. Professor Myres was a very busy man and his presence on that occasion was much valued. Then thanks would, he knew, be readily accorded to both Mr. Harvey and his son for the clear explanation they had given as to the actual state of the Church of the Holy Sepulchre. He for one would leave that meeting realizing that things were much worse than he had anticipated. He had been under the impression that the Church did not need a great deal of repair, but he had gathered from the remarks by Mr.

Harvey and his son that the whole building was in a state approaching ruin and that if it was to be maintained a large sum of money was immediately required.

The vote of thanks having been accorded amid hearty acclamation,

The CHAIRMAN on his own behalf and that of Mr. William Harvey and his son briefly returned thanks, and declared the proceedings at an end.

THE STRUCTURAL DECAY OF THE CHURCH OF THE HOLY SEPULCHRE

By William and John H. Harvey

Whether or no the Church of the Holy Sepulchre stands upon the historical site of the Tomb of Christ, the fact that a collection of buildings was erected and dedicated on this spot by Constantine and his mother Helena, so long ago as 335 A.D., should arouse our interest in its history.

For many years the work of Constantine remained intact, but in 614 it was burned by the Persians. It was rebuilt by the Patriarch Modestus in 626 and lasted for three centuries. Again fired by the Fatimids in 936 and 969, it was almost entirely destroyed by El Hakim the mad Caliph in 1009, but was rebuilt by the Byzantine Emperor Constantine Monomach in 1048.

When the Crusaders captured Jerusalem in 1099, they built a new church, which united the several earlier sanctuaries, and it is this church which stands to-day, a most remarkable example of a modified Romanesque style.

This Crusader building is now showing advanced signs of decay and we naturally ask ourselves whether the series of fractures and distortions which now imperil the structure are in any measure attributable to lack of care on the part of the builders. We may, in the first place, dismiss the question of faulty foundations, as practically the whole building stands directly on solid rock.

On the whole the church was, and remains, a building of massive structure, but it retains the thin strip buttresses of Romanesque Art and lacks even these on its principal fronts. (See plan, Pl. VII.) Consequently the outward thrusts from vaults and dome, and the disruptive forces of earthquakes have had free play except where counteracted by surrounding buildings.

In 1099, while the Crusader army was entering Jerusalem, there was in this country a building in course of erection, whose main walls exist to-day—this was the great hall of Westminster, built by William Rufus. It is of interest to compare the two buildings from a structural point of view. At Westminster are masonry courses ten inches in height, while those in the Church of the Holy Sepulchre are just double the size. In place of the timber roof of the hall, these solid walls had to carry great masonry vaults, the outer roofs themselves also being of stone, and adding enormously to the weight. The transepts are 72 feet high and 38 feet 6 inches in span. The central drum supporting the dome above the crossing, is 33 feet in diameter and the height of the whole is 115 feet. (See section, Pl. VIII.) Early drawings by pilgrims show a fumerole above the dome, adding another nine or ten feet to the total height.

The walls which thicken by offsets towards the bottom are the principal masses abutting the thrusts from within. To the north of the North Transept is a pre-existing Byzantine arcade which has walls only half the thickness of the Crusader work, but the vaults of this arcade had originally wooden tie-beams across the span to restrain the thrusts.

The Crusader Church was finished in 1149 ; half a century later than the original Westminster Hall, and its dominant style is the transitional Romanesque of Anjou. To find a building of a comparable pointed style in England, we must go to the choir of Canterbury Cathedral, built some thirty years later. The designer at Canterbury is known to have been a Frenchman, and it is significant that the master who reputedly built the Church of the Holy Sepulchre had the French name of Jourdain or " Jordanus." Almost the whole of the existing church, with the exception of the earlier rotunda, is essentially an Angevin Priory Church of the mid-twelfth century.

But the Church of the Holy Sepulchre presents a remarkable variety of styles of construction and ornament probably unequalled by any other church. Romanesque planning and general motive are combined with Gothic vaulting, classic cornices, Byzantine capitals, and a dome and mosaic pavements which suggest the Saracenic.

It is noteworthy that the enrichment of a large part of the work consists of delicately carved foliation with deep under-cutting, in some cases the background being completely hollowed through. The capitals of the columns, particularly those of the main façade, are of very fine workmanship. (See Pl. IX,a.)

The sketch of the church (Pl. IX,b) is a reconstruction based on early prints and gives a bird's eye view as in 1180 A.D. There can be no doubt that the original Crusader building was a magnificent structure. Since the twelfth century, however, a great many portions of the building have been destroyed or rebuilt, of which the principal are: the colonnade in front of the Parvis or forecourt; the Apse, which has been rebuilt in pseudo-Renaissance style of 1810; the fumerole over the Katholikon dome, and at a later date the dome itself, the latter having been recently rebuilt; the conical roof of the Rotunda, which has been replaced by an iron dome; the upper storeys of the Tower; and the dome over the Baptistery of St. John, north of the Tower, destroyed in the earthquake of 1545.

Earthquakes have been responsible, in great measure, for the damage. Shocks are recorded between the taking of Jerusalem by the Crusaders and the dedication of the church in 1149, a period of only fifty years. The builders undoubtedly understood the danger and took the best precautions in their power to guard against it. At least fifteen earthquakes of a serious order have taken place since Constantine's time, and a slight tremor is almost certain to occur every year.

In 1934, while the survey was still in progress, a very slight shock increased cracks over the apse.

Although earthquakes are largely responsible for the damage, the danger from vault pressures must not be overlooked. Arch and vault pressures are one of the chief reasons for decay in stone vaulted buildings, and during the survey primary attention was therefore given to them rather than to the results of earthquake shocks, as these latter were only contributory and not the original cause of decay. A slight shock would augment the overhang, and a winter storm would have the same effect, though neither could be held responsible for the initial trouble.

Previous experience at Rievaulx, Tintern and other Abbeys in England, where major earthquakes do not occur, showed that the overhangs and fractures at the Holy Sepulchre had reached the danger point and any further signs of decay would mean that all the pressures were correlated and were bringing about its final downfall.

Before any shores were put in position there was sufficient evidence from the state of the building, confirmed by the cracking of tell-tales, to show that the walls were in fact giving way. It was found that the upper parts of the structure were all leaning outwards, the North Transept particularly badly, the inclination amounting to eleven inches in its height. The South Transept was in very much the same state, and the eastern apse was cracking in its semi-dome and bulging at window level.

It became necessary, in the interests of public safety, as well as to secure the building, to erect shores to support the weakest parts. Steel shoring was chosen because, in the unsettled state of the country, it would have been unwise to place inflammable timber shoring outside the church.

The shoring was first erected on the outside of the building against the South wall of the Chapel of St. James the Less. The Rotunda was next encircled inside with a steel band, to prevent internal pressures on the cracked piers of the aisles. The main apse of the church was then taken in hand, with the high vaults of the transepts, and a band of steel was placed around the whole of the higher parts of the church, including the Katholikon dome.

Part of the roof of the church belongs to a Moslem religious trust, and its tenants at first refused to permit any work on that part of the building. As it was absolutely necessary to carry the steel through their boundary wall, their good will had first to be obtained, which took six weeks. This gives some idea of the difficulties attached to carrying out work in a building where six different Christian sects and Moslems as well have all to be consulted.

On this Moslem-owned part of the roof an area of ten feet by two feet of rain water lay in a large pool, showing that the roof sloped downwards to the centre, having sunk so that there is no longer a fall towards the outlets.

A mass of shoring was necessary against the North Transept (where the wall bulges to an overhang of eleven inches).

This had all to be hauled up to the roof, carried through the Moslems' quarters, and lowered into position.

The last work, on the exterior, was the erection of four shores against the main façade ; great care had to be taken to prevent injury to the carved stone work. Steel supports were also placed between the two western piers of the Katholikon dome, and another of wood to support the Crusader masonry of the North Transept and the adjoining Byzantine arcade.

By the middle of 1935 the building had been secured from immediate danger, but it was intended that works of permanent consolidation should be taken in hand without undue delay, as exposed shoring, besides being unsightly, gradually loses its effective strength unless continually inspected, repainted and repaired.

NOTE : For further information on the state of the building in 1934, see *Church of the Holy Sepulchre : Structural Survey*, by William Harvey. Oxford University Press, 1935. An Appendix by Mr. William Harvey on the present state of the church (March, 1938) follows.

APPENDIX

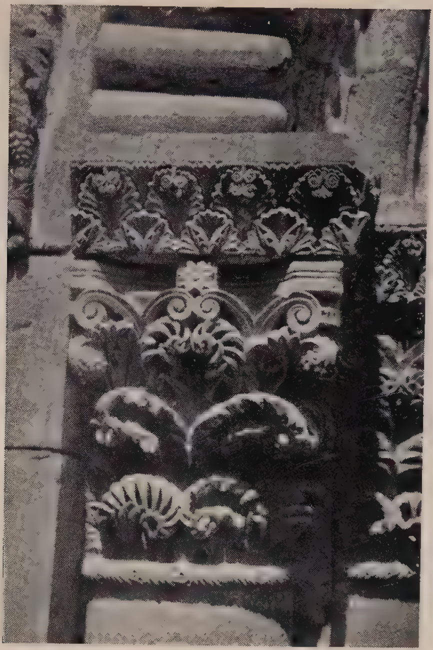
BY WILLIAM HARVEY

Inspection of the Church of the Holy Sepulchre from 23rd to 29th March, 1938.

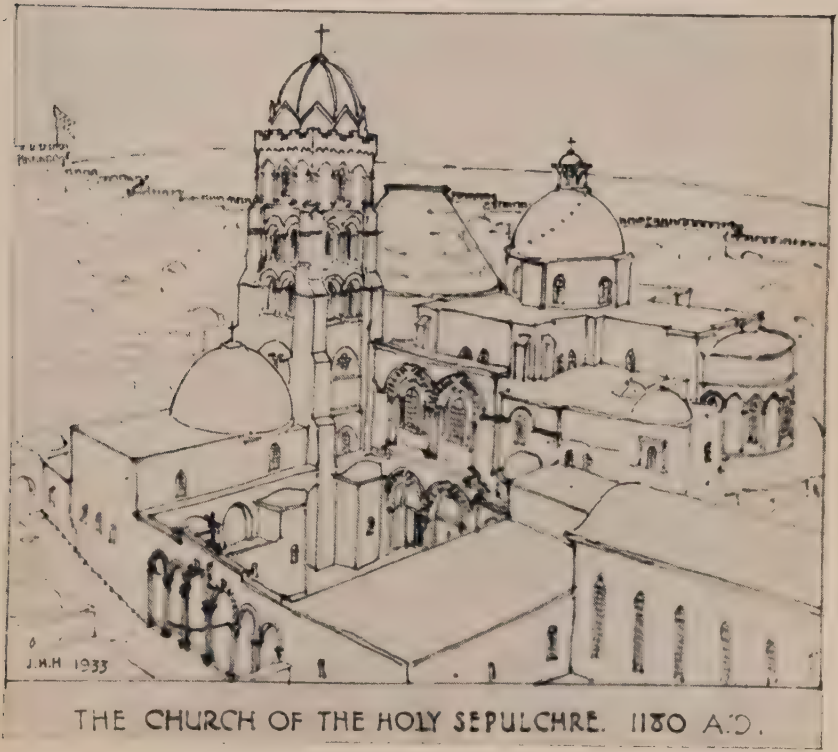
AFTER the temporary shoring had been erected in 1934–35 it was to be hoped that more permanent measures of repair would soon have been taken in hand ; the Government had been advised that the shoring was only good for two years.

The difficulty of raising funds, however, and the unsettled state of the country postponed further work.

In October last an earthquake again shook Jerusalem and the church was re-examined by the Palestine Department of Public Works in the spring of this year, with the result that I was asked to travel out immediately, by air, to inspect the church. The earthquake was so slight that many people in and about Jerusalem did not feel it, yet the tremor was sufficient to cause many new cracks and the widening and lengthening of old ones, ominous signs in a building of this age.



(a) A CAPITAL FROM THE SOUTH FRONT


J.H.H 1933
THE CHURCH OF THE HOLY SEPULCHRE. 1180 A.D.

(b)

One hundred and fifty cracks were carefully examined and in almost all parts of the building they told the same tale of strain in every part.

While movements had been checked in certain portions by the application of temporary shoring, it was evident that the earthquake had caused the remaining, unsupported sections, to move further from the perpendicular.

Similar features occur under stress of wind and weather in any very old arched and vaulted building, though the process is more gradual.

Three cracks in the drum, supporting the new reinforced Katholikon dome, were noteworthy: this drum had been consolidated and re-pointed in 1932–33, so that it was evident that the fractures were recent.

At the Western side of this dome, beside the main rotunda, more water was lying than had been the case in the previous survey, showing that the vaulted roof of the Triumphal Arch had sunk further.

The state of the masonry of the arches above and below had also become worse, being cracked as well as distorted; inside the building the piers which support the arches, had cracked at intervals from the floor up to the vault. The main arches of the church had also become seriously fractured.

The vaults of the whole upper part of the building had deteriorated and sunk to the extent that water, from the winter rains, continued to leak in despite re-pointing the roof.

Vibration caused by the multitudes who assemble for the Easter ceremonies might have resulted in a fall of the vaulting with a huge casualty list. To guard against this risk a great amount of steel shoring would have been necessary; the time required for designing and constructing these shores, would in Palestine be very considerable; and it would have been out of the question to complete them by Easter.

It was largely on this account that I recommended that the building should be closed to the public. This recommendation was acted upon by the Government and one of the anxieties of those responsible for the safety of the building has thus been removed.

But it is impossible to lay too much stress on the fact that the building itself stands in imminent danger and that its peril increases from hour to hour.

THE CHURCH OF THE HOLY SEPULCHRE IN 1862

By The Late Mrs. E. A. Finn

[Editor's Note.—We are indebted to Miss C. M. Finn for the following description of the Church of the Holy Sepulchre which was written by her mother, the late Mrs. E. A. Finn, when, as wife of the then British Consul between the years 1846–63 she obtained an intimate knowledge of the Holy Land. With the sketch (Pl. X), which is taken from *Stirring Times* by James Finn, the article is of particular interest in relation to the present problem of the restoration of the church.]

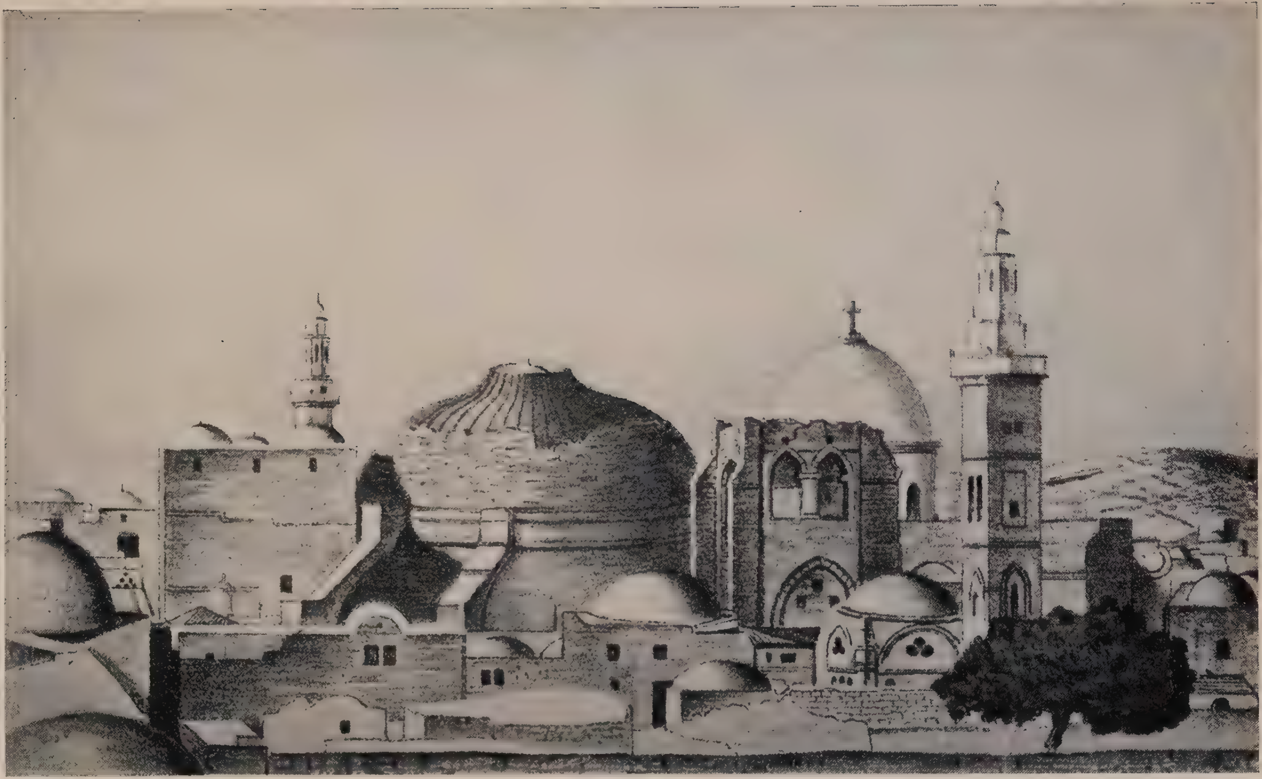
" The view in this vignette is taken from a terrace on Mount Zion, whence many a traveller has gazed upon the scene so familiar to his mind, yet so new to actual sight. The domes of the church, called in the beautiful Oriental phrase, the 'Church of the Resurrection,' are well known in their outward aspect to many persons, long before they reach Jerusalem, yet even these experience a sort of surprise when first they come within the greater dome, and perceive that this is but an outer covering to the Chapel of the Holy Tomb which stands beneath it, as some small model may stand beneath a glass shade for protection.

Those who stood within could look up and see the sky through broken lattice and framework from which the outer covering of metal was gradually being pulled off, and through which the rains in the winter used to come down on the congregation below. This was said to be done by Greek priests in order that they might have the opportunity to put on a new covering, the Turkish law being that none but the owner could put on the covering of a roof. A good deal of the dispute which had caused the Crimean War was upon this very subject, for neither the Latins nor any others could allow that the Greeks were sole owners of the great Central Church which belongs to all the churches, so as neither Greeks, Latins, or Armenians would allow the others to do the work which each desired the sole privilege of performing, nothing was done and year by year the ruin increased, till at last, in 1862, the Sultan, Mohammedan though he was, offered to abate the scandal by repairing the dome at his own cost. But the Christians declined the offer, which, if accepted might forfeit their right of absolute property in the church, and decay went ever onward.

At last, M. de Barrère, French Consul General in the Holy City, devised a plan by which this reproach might be done away. He suggested that the Sultan, as territorial Sovereign, the Emperor of Russia as Chief Protector of Eastern (Greek) Christians, and the Emperor of the French as Chief Protector of the Western (Latin) Christians should unite in restoring the dome, and present it as a peace offering to the Holy City. This was done. The French and Russian Sovereigns each appointed an architect to carry on the work, and the Sultan gave proof of his liberality by employing both of them as his own architects. A new and beautiful dome was thus given as common property to all the Christian Churches, each of them having the right to worship in turn at the Holy Tomb.

Thousands of pilgrims assemble beneath this Rotunda at the ceremonial of the Holy Fire, on Easter Eve. In the sketch may be seen the slightly flattened top of the dome, covered by iron grating. This grating afforded egress to the smoke from myriads of tapers lighted at the mysterious flame put forth by the Greek Bishop from within the tomb. When living in Jerusalem, we used to know that the Holy Fire had appeared, when we saw the column of smoke ascend from this dome towards Heaven. It was a strange sight in the bright sunshine, and against the clear blue of the mid-day sky, and a sad sight too, knowing, as we did, that the chief Ecclesiastics who took part in the ceremony would fain have discontinued it, but that they lacked the moral courage to do so.

The dome on the right, belongs to the Greek church, and covers their special chapel, in which is the stone that marks ‘The Centre of the World.’ The cross at the top of this dome was erected in 1861, by the Greek ecclesiastical authorities, who took advantage of an illumination being ordered to welcome the accession of the new Sultan, Abd el-Azeez. For the first time since the Moslem Conquest in 636 when Omar forbade Christians ‘ to place their lamps in public places, or to publicly exhibit the sign of the Cross,’ was so daring a violation of that humiliating compact possible. The Moslems were taken by surprise when at night this cross of delicate white lamps blazed forth in honour of their new Sultan! It is now always lighted up on the eve of Church Festivals, and forms a beautiful object gleaming over the city in the darkness of night.”



THE CHURCH OF THE HOLY SEPULCHRE IN 1862
(From a sketch by J. Finn)

THE LACHISH LETTERS THEIR DATE AND IMPORT

AN EXAMINATION OF PROFESSOR TORCZYNER'S VIEW

By J. W. Jack, M.A., D.D.

I. THEIR NATURE

These ostraca, eighteen in number, contain Hebrew writing in the ancient Phœnician script, some of it almost as clear as the day it was made (2,525 years ago). With one exception (No. I, which contains a list of names only), they are actual letters or despatches from one man to another, being from a certain Hoshaiah (השׁעיהו), located at a military outpost, to some high commanding officer named Jaûsh (יאושׁ) at Lachish (modern *Tell ed-Duweir*). They were discovered on 29th January, 1935, by the late Mr. J. L. Starkey, the director of the Wellcome Research Expedition, in a small room (believed to be a guard-room) adjoining the outer gateway of the city. They were lying buried in the burnt layer, some four to six inches deep with charcoal and ashes, just above the latest Jewish floor, and beneath the later Persian foundation courses. Hundreds of other jar fragments were found in the room, but owing to their burnt and decayed nature, it is impossible to know if they had once been inscribed. Probably, as Mr. Starkey has stated, much writing has been destroyed, and what we have now is all that has survived of a large correspondence. As the burnt debris arose from the destruction of the city by Nebuchadrezzar's army at the close of Zedekiah's reign, the letters were probably written, as shown later, about the beginning of 587 B.C., when the final siege of Jerusalem (with that of Lachish and Azeqah) had just begun, and when fresh efforts were being made to secure help from Egypt. In reading them, very imperfect though they are, we find ourselves brought into close contact with the inner religious, political, and military life of Judah at this period.

The text, so far as it is legible, has been admirably transliterated into Hebrew and translated into English by Professor Harry Torczyner, Bialik Professor of Hebrew in the University of Jerusalem, whose volume on the subject was issued in April last. Unfortunately, some of the sherds are in such a bad condition that they can never be deciphered. They were submitted, it is stated, to a scientific process, with the object of restoring the faded parts, but they were not rendered more legible than before. Altogether, however, they contain nearly ninety readable lines, though, even in some of the clearest of these, words and clauses here and there are obscured, which has led to different readings being suggested by different scholars. Even some of the readings given by Professor Torczyner are acknowledged by him to be exceedingly doubtful, dependent largely on conjecture, and we do well to recognize that no conclusions of any weight can be based on these at least. Transliteration and interpretation of some of the letters, indeed, is hopeless. Thus, in regard to No. X, Torczyner truly says, " Only very indefinite traces of this letter containing about thirteen lines are preserved ; here and there one can make out distinct letters—particularly ל stands out clearly—and many seductive possibilities suggest themselves, but no word can be read with certainty " (p. 141). On some of the letters certain traces suggest words, but any reconstruction is impossible. Even Mr. Lankester Harding's careful hand copies, which form one of the attractions of Professor Torczyner's volume, differ in some points from what the latter recognizes on the sherds (*cf.*, p. 135 n.1 and p. 187). " While it may seem strange," says Mr. Harding, " to have two different readings in the same book, I console myself with the thought that there must be at least ten other possible combinations of the same faint signs " (p. 187). It is necessary to state all this, as Torczyner, I think, bases much of his theory of the letters, especially their supposed connection with the prophet Uriah, on conjectural readings, accompanied by fanciful assumptions. At the same time, there is great reason for thankfulness in the fact that several of the letters are practically entire, and as there is little difference among scholars as to the translation of these, they form a valuable help for Old Testament study.

According to the excavators, all the ostraca come from common water jars of similar shape. In some of them the script occurs on both sides, beginning (as was usual with potsherds) on the outer and continuing on the rougher inner surface. A number of them fit together, showing that they have come from the same jar, and consequently no doubt at short intervals between each other (this is the case with those numbered II, VI, VII, VIII, XVIII).[1] The handwriting is not the same on all of them, and is not always uniform even on the same one. It is probable that Hoshaiah, from whom all the letters seem to come (his name occurs as the sender of No. III), was able to employ more than one scribe. Jeremiah, though he must have been able to read and write, dictated many of his prophecies to Baruch, who wrote them down upon "a roll of a book" (Jer. xxxvi, 4), and we find mention at the same time of two other scribes, Elishama and Jehudi. The letters are all written in iron-carbon ink (as shown by the chemical analysis, see pp. 188f), apparently with a reed or wood pen, the nib part of which must have been broad but not split. The writing is not the style of Phœnician-Hebrew that we find engraved on stone, but a fluent cursive form of it, bearing a striking resemblance, in some of the signs at least, to that on the Samaria ostraca (believed to date from Ahab's time, *c.* 860 B.C.).[2] They appear to have been the work of scribes well accustomed to such writing. Some of them have apparently been written hurriedly, for, as Torczyner points out, there are cases of haplography (such as חיהוה sometimes for חי יהוה, the formula of the oath, "Yahweh liveth"),[3] omission of the dividing dot between words, skipping of self-understood words, and other mistakes (such as עבך for עֲבְדְךָ in Letter III, 21).

Judging from the abject language and fulsome flattery used by the author of the letters, the individual to whom they were addressed, Jaûsh, must have been some very high official, with something more than mere local authority. Probably he was the military governor of this whole region, in control of the defences along the western frontier of Judah, and an intermediary with the authorities in Jerusalem. The author of the letters, Hoshaiah (a Biblical name, *cf.* Neh. xii, 32, Jer. xlii, 1, &c.), was apparently the leader of the military company located at some outpost on or near the main road from Jerusalem to the coast. It was probably an observation outpost, from which the movements of Nebuchadrezzar's forces could be watched. He speaks of himself in very abject terms in some of the letters, as his lord's " slave " and " dog," which reminds us of similar expressions in the Old Testament and in the Amarna Tablets. Indeed, in the Old Testament almost identical words occur. *Cf.* " What is thy servant, who is (but) a dog ? " (2 Kings viii, 13), " What is thy servant . . . a dead dog ? " (2 Sam. ix, 8), and other passages. In the Amarna Tablets, we find the same fawning servility before the Pharaoh : " I am the dust beneath the feet of the king, my lord," says Abi-milki.

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[1] The numbers bear no relation to the order of date.

[2] Letter No. 1 resembles most the writing on the Samaria ostraca, as will be seen from Mr. Lankester Harding's excellent chart of Alphabets (p. 220). Perhaps it was written by some scribe trained in Samaria or in that district.

[3] "Such cases of haplography," says Torczyner, "may not always be mistakes, but an actual rendering of the popular pronunciation of these words, exactly as we abbreviate in writing and in pronunciation word-compositions like 'don't' for 'do not,' and so on" (p. 16).

II. THEIR DATE

There are good grounds for believing that all these letters, without exception, are to be dated, as I have said, towards the end of Zedekiah's reign (the close of the Jewish monarchy). According to Professor Torczyner, some of them may be placed " a few years " earlier, but this, I think, is an incorrect supposition, which I shall deal with directly. Meantime, it only needs to be stated that, according to the excavators, the burnt layer in which all the letters were found (except one, No. XVI, which was dug up from beneath the Persian road, where it had doubtless found its way among the ballast) belongs without doubt to the final destruction of the city, which could only be about the close of Zedekiah's reign. It is true, there is a lower burnt layer beneath the surface of the adjoining road, consisting of a thin film of ash and carbonized debris, but this must be dated about ten years previously, probably to Jehoiakim's reign (when it is known that the city was attacked by Nebuchadrezzar for the first time and no doubt partly burnt), and has no connection with the layer containing the letters. Thus, Mr. Starkey says, " We have now clear stratification, just within the city gate, showing two burnt road-surfaces, separated by a depth of eight feet of fallen masonry. . . . The upper road-surface . . . is flush with the plastered floor of the gate-room, in which the Lachish Letters were found. . . . It is therefore evident that these two roadways, each covered by deposits of ash, belong to the two final phases of occupation, which each terminated in separate attacks by the power of Babylon, within a short period of perhaps ten years."[1] Again, writing for the Department of Antiquities in Palestine, Mr. Starkey says, " It is now clear that Lachish was burnt twice within a short time, but it is the last burning that destroyed the buildings cleared this season, as well as the guard-room within the outer city gate, where the Lachish Letters were found last year."[2] It is thus undoubted that the layer of ashes and soot containing the sherds can only be due to the later and final destruction towards the end of Zedekiah's reign, when Nebuchadrezzar besieged Jerusalem (587 B.C.).

Probably Jaûsh, the military governor, made his headquarters in the rooms (there are three of them) adjoining the gate during the final invasion rather than in the palace in the centre of the city, for the gateway fortification would be an important one, and it would be here that he would receive letters and other communications. One of the letters (No. IV), indeed, implies that it was sent to Lachish at the very time when this city and Azeqah were to some extent isolated, owing doubtless to the invasion, and were using fire-beacons as military signals.[3] The statement of the writer that he could not see (the signals of) Azeqah may mean that the weather conditions at the time interfered with the view, or perhaps that this fortress had already fallen to the invaders (it was much nearer to Jerusalem and consequently to the main Babylonian forces than Lachish was). At all events, the circumstances referred to could only have been such as were in existence for a few days or weeks before the destruction of these cities. As Torczyner says, " It seems that in this letter we are dealing with a very critical phase of the siege of Lachish, if not actually its last days " (p. 87).

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[1] *Illustrated London News*, 27th November, 1937.

[2] *Quarterly of the Department of Antiquities in Palestine*, VI, p. 224.

[3] Lines 10–13 : "*For the signals* (מַשְׂאֹת) *of Lachish we are watching* (or *waiting*) *according to all the signs* (אֹתֹת) *which my lord gave, because we do not see* (*the signals of*) *Azeqah.*" The word for " signal " here (מַשְׂאֵת) is the one used in Jer. vi, 1. The plural, which is מַשְׂאֹת seems to be intended. The word for " signs " here (אֹתֹת) has a different meaning from signals. It rather denotes " indications," " directions," " tokens," and concerned the arrangements made between Lachish and the outpost for the display of the signals.

Those who would place the destruction of Lachish at the close of Jehoiakim's reign (*c.* 597 B.C.) are therefore in error. They forget, too, that according to the archaeological evidence there was no actual destruction of Lachish or the cities of Judah at the close of Jehoiakim's revolt, or after his son's three months' reign, unless in a very partial sense. The Jewish kingdom with all its cities remained practically complete until the Babylonian monarch's second invasion, and even then Lachish and Azeqah succeeded in holding out (Jer. xxxiv, 7) until the final siege of Jerusalem at the beginning of 587 B.C. Add to all this the fact that, among the burned ruins of the city, was found the seal of Gedaliah, who is believed to be identical with the governor appointed to rule the land after Zedekiah's fall and captivity (2 Kings xxv, 22-25). According to the inscription on the seal, he was " over the house." It is far more likely that by this is meant " the house " of Zedekiah than that of Jehoiakim, who reigned about eleven years earlier; and if this be so, the actual destruction of the city cannot be put back for several years before the close of the monarchy. The letters must consequently be dated to the final siege, no doubt not long after the commencement of it, while Lachish and Azeqah were still holding out, in other words to about February, 587 B.C. (as shown later, on other grounds).

Torczyner has framed a theory, certainly erroneous and supported by confused and complex arguments of an imaginary nature, that the letters are concerned with the flight to Egypt of the prophet Uriah, who had spoken against the government in the same manner as Jeremiah. This flight with its tragic results must have taken place many years before the monarchy ended, and Torczyner endeavours to give some of the letters an earlier date—spreading the collection over " a few years " (p. 18)—in accord with the theory. He favours the supposition that they may have been special documents brought from the city archives (perhaps in the region of the palace-fort) during the last days or weeks of the city, and deposited in the gatehouse in connection with some military trial there, and consequently that the archaeological evidence for dating all of them just before the destruction of the city is not conclusive. But I am convinced that such a supposition is mistaken, for the letters bear no evidence of being connected with such a trial. His view that the room in which they were found may have been used as a court-room (a stone bench was found against one of the walls), and that they probably formed the dossier of Hoshaiah, examined there on certain charges of divulging confidential information (connected with the flight of Uriah to Egypt) or of neglecting his military duty, has no basis and is entirely out of keeping with the circumstances. No conclusions have ever been founded on a more fictitious idea. The fact that some of the letters are of an exculpatory nature is due to a different cause, which I refer to later. To regard them as a court-dossier is to read into them a construction which they do not bear. Why were they left in the guard-room after the case was finished, and not returned to the city archives ? Was the court sitting while the Babylonians were climbing the walls and setting fire to the city ? Besides, no documents or letters representing the government side of the supposed trial have been found in the room, though Torczyner escapes this difficulty by suggesting that these may have been on papyrus and have therefore perished. The theory of a court trial has clearly no foundation, and to extend the letters back over " a few years " is to mistake their meaning. What are the actual facts ? All the letters are of a homogeneous nature, belonging to one and the same correspondence between Hoshaiah and the governor of Lachish. One of them (No. IV) referring to the fire-signals is admitted by Torczyner to have been written just before the fall of the city. Another (No. VI) clearly refers to the complaint of the " princes " against Jeremiah at the time he was thrust into the dungeon (which was just after the final siege of Jerusalem had begun, *cf.* Jer. xxxviii, 4), while other four must have been written within a few days of this one, for they all formed part of the same pot (*cf.* pp. 12, 220). Taking all the circumstances into consideration, therefore, there is every reason to conclude that all the letters belong to the same period. Probably the whole correspondence covers only a few weeks, just before Nebuchadrezzar's forces launched their attack on the fortress.

III. THE PROPHET: NOT URIAH BUT JEREMIAH

It follows that the prophet referred to in the letters cannot be Uriah, for this prophet was put to death by Jehoiakim, probably a dozen years or more before this (Jer. xxvi, 20ff). Unfortunately, the only expression used in the letters is " the prophet " (הַנָּבִיא, *cf.* Nos. III, 20, XVI, 5), his name not being mentioned, except in XVI, 5, where only the last two letters of it remain (הו), showing that it ended in -yahu (-iah). But how could he be Uriah? The circumstances of this prophet's death are mentioned in Jer. xxvi, which has to do with certain events in Zedekiah's time (for xxvi, 1, and xxvii, 1, referring to Jehoiakim's reign, are acknowledged to be glosses, *cf.* xxvii, 3), but his death occurred under Jehoiakim some years before these events happened, and the circumstances of it were only brought forward at this later date by " certain of the elders " as a warning to Jeremiah in his prophesying against Jerusalem. Two precedents, indeed, were instanced—one that of the prophet Micah in the days of king Hezekiah over one hundred years before, and the other that of Uriah in the time of Jehoiakim. To put back some of the letters to the time of this latter prophet is therefore to contradict not only the archaeological but also the Biblical evidence. To suit the theory, it is necessary to extend the letters back for many years. Those which Torczyner regards as referring to " the prophet," especially the group of five all written upon fragments of the same pot, and at least three others (III, XII, XVI) " reflecting the same situation " (as he thinks, p. 204), are assumed to have been written some years earlier. But this is surely unwarrantable, for the letters referred to would require to be dated, as already pointed out, at least twelve or fifteen years earlier, seeing that Uriah was put to death in Jehoiakim's time. The idea advanced by Torczyner (pp. 69, 206) that his death may not have taken place till Zedekiah's reign, perhaps only a year or two before the close of it (p. 69), is contradicted by the Biblical record, which distinctly places it under Jehoiakim (Jer. xxvi, 22, 23):

> "Jehoiakim the king sent men into Egypt, namely, Elnathan the son of Achbor, and certain men with him; and they fetched Uriah forth out of Egypt, and brought him unto Jehoiakim the king, who slew him with the sword, and cast his dead body into the graves of the common people."

Torczyner's efforts to alter this Biblical narrative, taking out the name Jehoiakim and leaving only "the king," or substituting Zedekiah's name, are feeble and ineffectual, as well as unjustifiable; and his attempt to support the alteration by quoting other supposed errors in the Book of Jeremiah is quite irrelevant. On the same ground any alteration in the Biblical record to suit one's theories could be justified. The fact, moreover, that it was not Zedekiah but Jehoiakim who put Uriah to death is entirely in accord with the character of the two kings, for Zedekiah was vacillating, timid, and irresolute, and not the one to commit such a deed. All the estimates that we have of his character show him to have been a weakling, afraid of his advisers and courtiers, and without energy or character for any outstanding action or public role. In reference to Jeremiah he said to his officers, "He is in your hand, for the king is not one who can do anything against you" (Jer. xxxviii, 5). On the other hand, Jehoiakim was tyrannical and vindictive. When the roll containing the prophecies of Jeremiah was brought to him as he sat before the brazier-fire in his winter palace, and as every three or four columns were read to him, he cut them up with a penknife, and threw them into the fire (Jer. xxxvi, 21ff.). The king who did this—who showed his tyranny and disregard of God by burning Jeremiah's roll, was clearly the one who slew Uriah. It is thus evident on several grounds that the letters have nothing to do with this prophet of Jehoiakim's time, and it is needless to make changes in the sacred record so that he may be brought into the correspondence.

To uphold the theory, Torczyner finds it necessary to make other alterations. According to the passage just quoted, Jehoiakim sent "Elnathan the son of Achbor" (עַכְבּוֹר) and others with him into Egypt to arrest Uriah and bring him back. Now, as Letter III states that the "commander of the forces," a certain Kephiriah ([Yi]khbariah, according to Torczyner's transliteration), "son of Elnathan," had just gone down with a party of men to Egypt (no doubt to make an effort to obtain Pharaoh's help),[1] Torczyner assumes the two incidents to be one and the same, and regards " Elnathan the son of Achbor " in the Book of Jeremiah as a probable error (though it occurs also in xxxvi, 12, in quite a different connection), the names of father and son having been transposed, he thinks. But, in reply, it may be pointed out :

First, the two events have probably no connection with each other, for the Elnathan in Jehoiakim's time, being a royal officer, would hardly escape deportation with the other officials at the close of this king's reign (597 B.C.), or at least three months later when his son Jehoiachin was deported (*cf.* 2 Kings xxiv, 12–16) ; and as the date of the letters is about ten years later than the deportation, it is not unlikely that Kephiriah, Elnathan's son, had now been put in his father's place as commander of the forces. If there should be any dubiety as to the probability of Elnathan being carried into captivity, let the narrative of Josephus (*Ant.* X, vi, 3 ; X, vii, 1) be studied, in which we are informed that, at the close of Jehoiakim's reign, the deportation included the " principal persons in dignity, 3,000 in number," and at the close of Jehoiachin's not less than 10,832 (" all that were in the city," including Ezekiel). Is it likely that a man in Elnathan's position, believed moreover by many scholars to be Jehoiakim's father-in-law (*cf.* 2 Kings xxiv, 8), would escape the fate of the leaders ? One can understand his son Kephiriah being left, and in the course of time taking his father's place as commander of the forces.

Second, a careful study of the Phoenician text shows that there is serious doubt, to say the least, as to Yikhbariah (*i.e.* [י]כבריהו) or 'Achbor (עַכְבּוֹר) being the correct transliteration of the name. There is no evidence of the existence of the first syllable 'A- or Yi-, nor of any sign whatever here (line 15). Torczyner, however, has inserted one—not ע, the first letter in 'Achbor, but י. The former letter would be necessary to show identity with the Biblical name, but as

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[1] Lines 14–18 : " *Down has gone the commander of the army, Kephiriah son of Elnathan, to come to Egypt. And Hodaviah, the son of Ahijah, and his men he sent to take from here.*" Instead of " *to take from here,*" Albright would translate (incorrectly I think) " *to take* (*get*) *provisions* " (BASOR, No. 70, p. 14), regarding מזה as an equivalent of מָזוֹן.

'Achbor-iah would mean " Yahweh is a mouse," Torczyner prefers Yikhbariah, " Great is Yahweh." He thus avoids an absurdity, but thereby destroys the identity of the name with the Biblical one and shows his whole argument about Uriah to be unsound, for it is largely based upon the supposed identity of the names. The only way out of the discrepancy is to make the Biblical historian guilty of a double fault in his not only transposing the names, but substituting 'Achbor for Yikhbariah, two names which are not only dissimilar but have a totally different meaning. Moreover, the sign which Torczyner takes to be a *b* is more probably a *p* (or *ph*). In proof of this, one has only to compare the sign (as seen in Messrs. Ilford's photograph) with the one for *p* near the end of line 4, or the one in line 10 (in the word סֵפֶר where it is also followed by *r*), or the one in Letter VI, 4, in all of which the identity with *p* is clearly observable. What Torczyner takes to be the bottom part of the loop for *b* is really the stem of the *r* that follows ; and if the sign be compared with the *b* at the end of the same line, it will be noticed that the latter has a more acute angle at the top. The name should thus be transliterated Kephiriah (" Yahweh is a young lion "), which is in accord with Isa. xxxi, 4, where Yahweh's invincible might is compared to that of this animal (כְּפִּיר or כְּפִּר).

Third, those who regard the Letters as referring to Uriah's flight lay weight upon the supposed coincidences with the Biblical narrative, but apart from the names just referred to, the only one is the visit of the commander of the forces with a party of men to Egypt. But what more natural during the fearful throes of the siege than a mission to Egypt to secure help ? Indeed, the defenders, as famine and pestilence increased, must have sent more than one delegation there for this purpose, in the fervent hope that the Pharaoh Hophra would make some attempt to relieve the situation.

There seems sufficient evidence to lead us to conclude that " the prophet " mentioned was Jeremiah. Thus, in Letter VI, 4–7, where we find the " officers " complaining that the words of a certain person (evidently " the prophet ") were detrimental to the national interest, the language is almost identical with what the " princes " in the Biblical record are reported to have said of Jeremiah during the invasion. According to the letter, the " officers " state that " *the words of the* [*prophet*] *are not good*, (*liable*) *to weaken the hands*, *to make sink the hands of the m*[*en in the*] *city*[1] (i.e. Jerusalem)." Compare this with Jeremiah xxxviii, 4, where we read that the " princes," complaining of Jeremiah to the king, state that " *in speaking such words . . . he weakeneth the hands of the men of war that remain in this city* (i.e. Jerusalem) *and the hands of all the people*." The word used for " officers " in the letter is שָׂרִים, which is the identical one used for " princes " in the Biblical text, where it never signifies " sons of the king " (*cf*. Zeph. i, 8, where שָׂרִים is distinguished from בְּנֵי הַמֶּלֶךְ), but more precisely members of the official class, *i.e.* " officers " acting under the king as his counsellors and rulers (*cf*. Gen. xii, 15, Num. xxii, 8, Judges viii, 14, Isaiah xxx, 4, &c.). Moreover, both in the letter and in the Biblical text the prophet's " words " are complained of, and in both cases the same verb רִפָּה is used for " weaken," and with accusative " hands." The whole similarity, indeed, is too striking to be accidental. The " officers " who are referred to in Letter VI as complaining of Jeremiah must be the same men who complained to the king in Jer. xxxviii, 4. This aspect of the matter goes to prove that " the prophet " mentioned in the letters must have been Jeremiah. This view, too, is borne out by the expression " *the* prophet " used in the letters, for who could be meant but Jeremiah, whose activities placed him above all others in Judah at this time ? His name occurs in Letter XVII, where the first sign is broken off, but the rest, -rmiah (רמיה), is clearly visible,[2] whereas nowhere in all the letters is there any mention of the name Uriah.

IV. THEIR POLITICAL BEARING

Instead of the letters being connected with the flight of

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[1] Torczyner takes the transliteration to be ידי הא[רץ ו]העיר, " *the hands of the country and the city*," but it is more likely to be ידי הא[נשים ב]עיר, " *the hands of the men in the city*," for the word " hands " can only apply to human beings.

[2] Cyrus H. Gordon takes the first three letters here to be *dny*, and would translate *adoni* " my lord " (BASOR, No. 70, p. 18), but the first letter is clearly ר, for (unlike ד) the stem projects a long way below the line ; the second is too broad for נ and can only be מ ; and there is a fourth letter which is undoubtedly ה.

Uriah, they have to do with the political condition of Judah at the end of the monarchy, and can only be understood in this light. The period of world-empires was in force—the new Babylonia on the east and Egypt on the west, each striving to secure control of Palestine as the bridge between Asia and Africa. The little kingdom of Judah could no longer be isolated—it was crushed between these two world powers, sometimes attacked by the one, sometimes by the other. It had to choose which one to serve, and naturally its policy fluctuated constantly between the two. If it intrigued with one, or allied itself with one, its land was invaded by the other and heavy tribute exacted. At the date of the letters, Zedekiah, who was on the throne, had been allowed to rule by the grace of Babylonia, but after a few years he yielded to Egyptian intrigue, as Moab, Ammon, Tyre, and Sidon had also done, and relying upon the support of Pharaoh, he refused to pay his tribute to Babylonia. As a result Nebuchadrezzar's forces invaded Judaea, and were now engaged in the siege of Jerusalem and in an attack on the other cities (Lachish and Azeqah) which had refused to submit (Jer. xxxiv, 7). It was under such political circumstances that the Lachish Letters were written, dating as I have shown, from the time of the invasion. The two parties, pro-Egyptian and pro-Babylonian, existed side by side in the land. King Zedekiah, his rulers and princes, and probably most of the people, favoured Egypt, and were looking for help from there, while the prophet Jeremiah and his followers advised submission to Babylonia, declaring that resistance to the powerful forces of Nebuchadrezzar was futile. This political question was the burning one of the day, and existed everywhere throughout Judah, and to understand this situation is to understand the letters, which were written under these circumstances of dissension and heartburning, when divided counsels rent the unhappy city of Jerusalem.

Jeremiah, as we know, was heart and soul with Babylonia. He sternly condemned the pro-Egyptian policy, for he saw twenty years of struggle and preaching being overturned, and the nation being dragged into idolatry and other evils. The burden of his utterances during the siege was that the city of Jerusalem and all it contained was doomed, but that those inhabitants who deserted to the Babylonians might save their own lives (Jer. xxi, 9, xxxviii, 2, 17). As a result, constant desertions took place (Jer. xxxvii, 13, xxxviii, 19), and we need not be surprised that the pro-Egyptian party regarded him as a dangerous traitor (Jer. xxxviii, 4), and viewed with suspicion his relations with the king. When (as we are informed in Letter III) the commander of the Jewish forces had gone down to Egypt, doubtless to inform Pharaoh of the desperate plight of Jerusalem, a statement follows immediately that " the prophet" (undoubtedly Jeremiah) sent a message of warning to a certain Shallum (son of Jaddua), who may have been a leader of the pro-Egyptian party, or perhaps some friend in the same danger as himself, saying " Beware ! " (הִשָּׁמֵר)—a word which was probably intended to indicate the main substance of the letter. As it happened, his predictions turned out only too true. " Egypt," says S. R. Driver, " was the evil genius of the people of Palestine ; it encouraged them to revolt with promises of help, and then failed them when the hour of need arrived. Israel, the Philistines, and Judah all in turn paid the penalty of relying upon the same broken reed."[1]

To realize this political situation, as I have said, is to understand Hoshaiah's letters. Lachish and its governor, let it be remembered, must have been opposed to Jeremiah. Lachish was a city largely influenced by Egypt, and in constant contact with it, and this alone would lead it to be against Jeremiah at this time. The excavations have shown a closer connection with the land of the Pharaohs than was suspected. The bowl (unfortunately in twenty-five fragments) which was discovered in the ruins, with Egyptian text upon it, shows that the authorities at Lachish were probably using, or at least were accustomed to the Egyptian calendar and the Egyptian system of numeration in their local records. This, it is true, was in the time of Merenptah (*c.* 1230 B.C.), but a large number of scarabs and seals of later date (well into the Ramesside era) have been unearthed, and all indications point to this connection with Egypt continuing unbroken right down to the end of the Jewish monarchy. It can easily be understood, therefore, on which side Lachish would be during the Babylonian invasion, and how strongly it would disapprove of Jeremiah's attitude and words. Add to all this the fact that Lachish was under a military commander who could only have been on the side of the Jewish royal party, and who appears to have been very friendly with king Zedekiah, even receiving letters from him and his officers (*cf.* Letter VI). Torczyner (p. 66) mistakenly assumes Jaûsh and his men, *i.e.* the city of Lachish, to be pro-Babylonian, for he regards them as followers of " the prophet " (*i.e.* Uriah, in his view), who is known to have preached peace with Babylonia. But this is entirely erroneous, for they were certainly on the side of Egypt and looking for help from there.

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[1] *Authority and Archaeology*, ed. by Hogarth, p. 103.

On the other hand, Hoshaiah, who was located in the outpost, appears to have been pro-Babylonian like Jeremiah, or at least was suspected by certain accusers (including Jaûsh) of being so, and this explains the exculpatory nature of his messages. If, as seems probable, sherd No. I contains the names of some of those with him, the fact that all of them except one have Yahweh endings, like his own, seems to show that Hoshaiah's whole company, indeed, may have had leanings towards the policy so vehemently advocated by Jeremiah. At all events, there seems to have been a rumour (or perhaps a report to Jaûsh) that Hoshaiah was taking the prophet's side, and he had apparently received a letter on the matter from Jaûsh. In reply (Letter II), he expressed surprise at the rumour, and the fervent hope that Yahweh would deal with the authors of it. " *May Yahweh trouble* (*or confound*) *those saying* (*such*) *a thing*, *which I did not know about* " (lines 5, 6).[1] Jaûsh, not being satisfied, wrote again on the matter, and this displeasure on his part caused Hoshaiah considerable perturbation, as we find from the first part of Letter III, where he states that it "made his heart sick." "*Thou didst not know about it !*" wrote Jaûsh indignantly, "*Read* (*my*) *letter !*" (lines 8, 9).[1] The serious disapprobation expressed led Hoshaiah to write a message at once (probably of an apologetic or exculpatory nature) to a certain individual known as "the inspector" (הַפֹּקֵחַ) (Letter III, 4)[2] who may have been the complainer or the official investigator ; and in reply to Jaûsh's communication Hoshaiah stated, in effect, that he had not received any such letter from him as that referred to, and he strengthened his assertion with the oath "Yahweh liveth," which occurs so often in the Old Testament. "*Whatever letter may have come to me*," he said, thoroughly disconcerted and rather confused, "*I have not read it, nor has anyone tried to read it to me, nor have I seen anything of it at all*" (Letter III, 9–13).[3] This seems rather an extravagant statement, but it is well to remember, in justice to Hoshaiah, that in the disturbed state of the country, perhaps with couriers not fully trustworthy and the enemy watching, it was not impossible for a letter from Jaûsh on such

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[1] יַעְכֹּר יהוה אֶת-אֹמְרֵי דָבָר אֲשֶׁר לֹא יְדַעְתִּהּ. The second letter of יַעְכֹּר is not easily decipherable, and some scholars take it for ז, making the word a repetition of the one in the previous line, and regarding it as the Hiphil Jussive יַזְכֵּר, *i.e.* " *cause to remember*," " *reveal to.*" Torczyner takes it for ב, making the word יַבְכֵּר, which is quite unknown in Hebrew, but he regards it as another form of בקר, " *seek out*, etc.," though there is no ground whatever for this view. After a very careful and patient examination of the sign in the photograph, I am convinced that it is not a ב. One has only to look at the ב in line 4 and in the beginning of line 5 to see that the stem was always curved, whereas the stem or mark of the disputed sign is perfectly straight, and even projects at the top beyond the loop. The sign can only be ע, and the supposed stem is probably an accidental blemish or marking on the sherd. I am persuaded, too, that the reading אֹמְרֵי is correct, " *those saying*," as it suits the sense admirably, and the combination אמר דבר is found frequently in the O.T., especially in Jeremiah (*cf.*, 1 Sam. viii, 10; Jer. xiii, 12, xiv, 17, xxiii, 38, xxxi, 23). Instead of " those saying (such) a thing," we might translate

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"*those uttering* (*such*) a *report*," for דָּבָר is frequently used in this latter sense. The suffix in יְדַעְתָּהּ is, I think, explainable on the grounds referred to by Torczyner (p. 56). "Which I did not know about" might be put equally well "*which I was not aware of*."

[1] Translation suggested by Professor Albright (BASOR, No. 61, p. 12). Here ידעתה represents the 2 s.m., with suffix "it," instead of the 1 s. as in Letter II, the difference being due, no doubt, to the two letters being written by different scribes, as is quite evident from the Table of Alphabets.

[2] We have adopted Albright's earlier interpretation of הפקח here (*cf.* BASOR, No. 63, p. 37), vocalizing it as the part. act. of פקח (*cf.* Ps. cxlvi, 8) in the sense of "attend to," "inspect," a meaning which it often has in later Hebrew (*cf.* פקח על, "to open one's eyes upon," *i.e.* "to inspect." Torczyner takes the word to be the adj. פִּקֵּחַ, and would translate "the open-eyed one," *i.e.* the prophet (referred to in line 20 under the term הַנָּבִיא). But one fails to see why two different expressions, הַפִּקֵּחַ and הַנָּבִיא, should be used in the same letter to designate the same man. If the word be not a personal name, I prefer Professor Albright's interpretation "the inspector," which suits the sense of the passage, and accords with the later meaning of the term.

[3] This does not imply, of course, that Hoshaiah was unable to read, though Torczyner has taken this view.

a matter to have gone amissing or not to have been delivered. It appears to have been a further letter giving proofs or details about the report, and plainly involving Hoshaiah. It must have been a communication of some importance, for in Letter VI (12–16) Hoshaiah found it necessary once more to disclaim receipt of it, with a stronger asseveration this time (" Yahweh liveth, thy God ").[1] Jaûsh continued to be disturbed over the matter. We find from No. VI that he actually sent Hoshaiah letters from king Zedekiah and the ruling princes, in which the words and pro-Babylonian policy of Jeremiah were strongly condemned. " *Read these letters*," wrote Jaûsh, " *and you will see (for yourself) that the words of the prophet are not good—they are weakening the hands of the people in the city and the whole country* " (lines 3–7). Unfortunately, an illegible part immediately follows this statement in Jaûsh's letter, but it may have contained some announcement that imprisonment or death awaited the prophet, for according to Torczyner's translation (here the text, it should be stated, is partly conjectural), Hoshaiah in reply begs Jaûsh to use his influence with the king in order to save the prophet—an appeal which seems to show that Hoshaiah was by no means free from Babylonian leanings, in spite of his protests. The same conclusion follows from Letter V, according to which Hoshaiah had been accused by someone (in letters to Jaûsh) of " cursing " the royal house, the malediction (if it actually happened) being due doubtless to Hoshaiah's disapproval of the king's attitude towards Jeremiah. " *Now has thy servant returned the letters to my lord*," Hoshaiah wrote, " *May Yahweh let thee know what (really) happened. Why should I curse the king's seed?* " (*cf.* Exod. xxii, 28, 2 Sam. xvi, 9, Mal. ii, 2.).[2]

[1] The interpretation I have given of Hoshaiah's denial accords with that of Professor Albright, who says, " I infer that the sweeping statements in lines 9–13 refer only to one letter which the writer claims that he did not receive " (BASOR, No. 61, p. 13).

[2] Instead of זרע, " seed," Albright would transliterate ירע (from רעע), *i.e.* " *injure* " the king (BASOR, No. 70, p. 15). The first letter, however, is clearly ז. It is true, it has no downward stroke at the end of the lower line, but it need only be compared with the ז in III, 18, to notice the identity, for the latter has no downward stroke either. In י the right hand stem always projects below the cross-bar (see Table of Alphabets). Seeing that the word is זרע, " seed," Albright's translation of the rest of the sentence becomes of no effect.

Instead of the letters being a court-dossier, in a trial of Hoshaiah for divulging confidential information regarding Uriah, it is evident that they are easily explainable as reflecting the political situation of the time. Jaûsh was naturally a strong supporter of the king and government, while Hoshaiah and his party were inclined to follow Jeremiah, but were afraid to adopt this attitude openly in case of trouble.

V. THEIR CHRONOLOGICAL SETTING

From all the facts I have referred to, the date of the letters can be fixed precisely without difficulty. They appear to have been written, as pointed out, at the beginning of 587 B.C., when the final siege of Jerusalem (with Lachish and Azeqah) had commenced, and just before Lachish fell. The question as to the precise time when Lachish fell, together with the order of events during the invasion, may be elucidated by combining the Biblical narrative with that of Josephus (*Ant.* X, vii, 3–5), and we can thus place the letters in their proper chronological setting. The facts seem to be as follows :

Zedekiah, we are informed, had made a league of mutual assistance with the Babylonians, but after eight years of this, *i.e.* in the beginning of his ninth year (588 B.C.), he broke it and went over to the side of Egypt, hoping that the Pharaoh (Hophra) would defend him in this policy. On Nebuchadrezzar receiving word of this revolt, he marched his forces into Syria, making his headquarters at Riblah on the Orontes, probably in the spring or summer of 588 B.C. From this Syrian centre he sent an army south and laid Judaea waste. His forces captured all the fortified towns, except Lachish and Azeqah which succeeded in holding out (Jer. xxxiv, 7), and they began a siege of Jerusalem. When Hophra was informed of the unfortunate position of Zedekiah, his ally, he marched an army towards Judaea. On hearing of this, the Babylonian forces departed from Jerusalem, and went down to meet the Egyptians, probably towards Gaza or somewhere on the coast road.

The false prophets at Jerusalem now became active, persuading Zedekiah that the enemy would not return, and that all was well. Jeremiah, however, endeavoured to confute these false predictions, but his words only roused the Jewish rulers against him. On his seeking to pay a visit to his native town of Anathoth for purposes of business, he was arrested on his way there, and falsely accused of attempting to desert to the Babylonians. Being brought back to Jerusalem, he was thrown into prison. Nevertheless he continued his warnings of impending calamity, though Nebuchadrezzar's forces were still away from the city, " broken up for fear of Pharaoh's army " (Jer. xxxvii, 11).

The Babylonian forces succeeded in putting the Egyptians to flight, pursued them, and drove them from the land (*cf.* Jer. xxxvii, 7, Ezek. xxx, 20ff). Having done this, they made a *second* expedition into Judaea in the ninth year of Zedekiah, on the tenth day of the tenth month, *i.e.* towards the end of December, 588 B.C., or early in January, 587. They now made a determined effort to deal with the cities of Lachish and Azeqah which were still unsubdued, and also commenced a second prolonged siege of Jerusalem (2 Kings, xxv, 1–3), lasting eighteen months. Their efforts were aided by pestilence and famine ; and though Jeremiah was still kept in prison, he did not cease to proclaim the danger that threatened, and exhorted the rulers to open the city gates and admit the Babylonians as the only means of safety. His words, however, were despised, and complaint was made officially to the king that they were weakening the hands of the men of war and the morale of the whole people (as stated both in Jer. xxxviii, 4, and in Letter VI). As a result, Jeremiah was removed from prison and cast into a dungeon, in the hope that he might be suffocated and die.

Now, if we are to follow Josephus, the date of Letter VI (seeing that the complaint referred to is distinctly mentioned in it), and consequently of the rest of the letters also, must be just about this time, *i.e.* not long after the second and final siege of Jerusalem had commenced (*cf.* Josephus, *Ant.* X, vii, 4, 5). We are probably not far from the truth, if we date the letters about January–February, 587 B.C., after the siege had been a month or so in existence. Doubtless the mission of the commander of the Jewish forces to Egypt, mentioned in Letter III, was intended, as I have suggested, to make a fresh appeal to Pharaoh for help under the new and desperate circumstances in which Jerusalem now found itself. Meantime Lachish and Azeqah were still holding out courageously (*cf.*

Jer. xxxiv, 7), though largely isolated and dependent on fire-signals from the walls (Letter IV). But these two cities, being much smaller than Jerusalem, and not having sufficient defences against Nebuchadrezzar's powerful engines of war, were soon overwhelmed and destroyed by fire. As numerous carbonized olive stones have been found in the embers at Lachish, this city appears to have fallen not long after the autumn olive harvest, which usually took place in the Shephelah in November or December. The date of its fall is thus in agreement, on archaeological grounds, with the date I have suggested for the letters. It also accords with the historical fact that armies like those of Assyria and Babylonia were in the habit of subjugating the minor cities of a country before completing the siege of the capital. Jerusalem managed to maintain itself many months longer, but ultimately in the end of June, 586 B.C., its walls were breached, and it was captured.

Though Lachish and Azeqah were reduced to using fire-signals for certain purposes (perhaps to announce the approach of the Babylonian forces, or an attack by them), they could not have been entirely isolated, seeing that letters could still find an entrance and exit (though doubtless with some difficulty). The same, we know, was the case with Jerusalem, for Jaûsh received letters from the king and princes there (*cf.* Letter VI), and Hoshaiah was able to communicate with it in some way (*cf.* Letters IV and XVIII). Even after eighteen months of siege, when we might suppose the investment of Jerusalem to be complete, Zedekiah was able to find a way out at night (" by the way of the king's garden, by the gate betwixt the two walls ") with his wives and children, his captains and friends—a fairly large company—and it was not until certain Jewish deserters had informed the Babylonians of this " at break of day " (Josephus) that the latter were made aware of it, and by this time the king and his party were actually near Jericho.

VI. THE LOCATION OF THE OUTPOST

The statement in Letter IV that the signals of Lachish could be seen, while those of Azeqah (modern *Tell Zakariyeh*) could not, seems to show that the outpost was nearer to the former city. I have drawn attention in another place[1] to the fact that Mareshah, a city fortified by Rehoboam, suits all the conditions perfectly. The site of this ancient city (now known as *Tell Sandahanna*) lies four or five miles north-east of Lachish, one mile south of *Beit Jibrin*, and eight miles south of Azeqah. From here one could look down on the main route (only a mile distant) from Jerusalem to Eglon, and thence to Gaza and Egypt, and thus watch the movements of enemy troops. I have pointed out the suitability of the place as an observation post, as the hill has a number of extensive rock-chambers, once used as dwellings, and a large party could easily be hidden in one of these. But I would add here that, apart from this particular suitability, it is known from the excavations of Dr. Bliss that the city probably contained military barracks. This archaeologist uncovered a rectangular building, with walls five feet thick, which contained six rooms, each of them seventeen feet wide and some of them thirty-five feet long, and which seems to have been used for housing soldiers. It is true, the fortified place which he excavated belongs to the Seleucian period (330 B.C. downward), but it is known to have been built on the ruins of the earlier Hebrew city, and the building referred to is believed to go back to the period of Rehoboam (*c.* 930 B.C.). In this case we can understand the statement of Hoshaiah in Letter III that the commander of the forces had sent an order " to take Hodaviah and his men from here " to accompany him down to Egypt, the reference being apparently to a squad of soldiers. Besides, Mareshah was the home of prophets, and this would have something to do with its pro-Jeremiah tendencies. Here lived Eliezer, son of Dodavahu, who prophesied against Jehoshaphat (2 Chron. xx, 37) ; and here belonged Micah, who also proclaimed, as Jeremiah did, that Zion would be " plowed like a field and Jerusalem become heaps " (Jer. xxvi, 18). Torczyner's view that the outpost was at Kirjath-Jearim (the native town of Uriah) cannot be correct, for archaeologists and scholars believe this place to be modern *Enab* or *Abu Ghōsh*, which is at the very least twenty-five miles distant from Lachish, and it would be impossible to distinguish signals so far away. Albright would locate the post to the south-east of Lachish, in the neighbourhood of *Tell Beit Mirsim* (Debir), but this would put it about twenty miles from Azeqah, which seems too far to maintain any connection.

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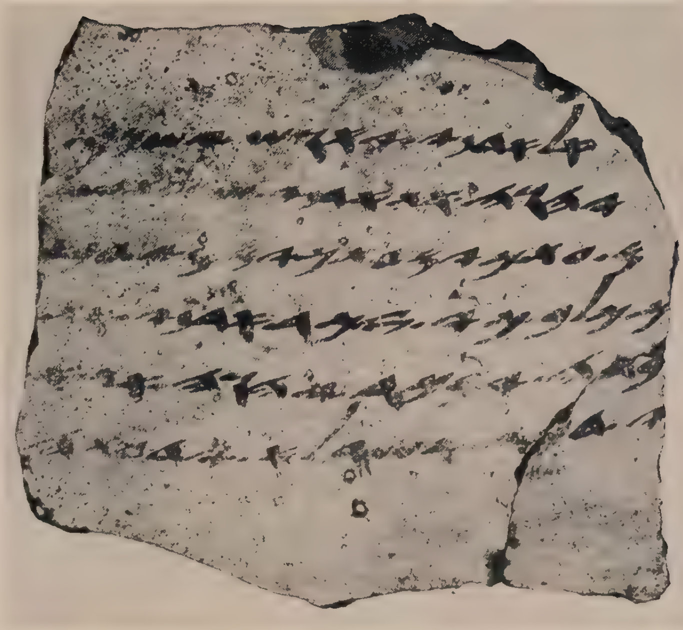
[1] *Expository Times*, June, 1938 (" Recent Biblical Archaeology ").

VII. THE QUESTION OF NEDABIAH

A question arises concerning Nedabiah, an individual believed by Torczyner to be mentioned in No. III as the bearer of a letter. A careful examination of the Phoenician characters shows that the name is not Nedabiah but Ṭobiah. What Torczyner takes to be *Nd* is certainly *Ṭ*. The idea, too, that this Nedabiah must be identified with the grandson of king Jehoiakim (*cf.* 1 Chron. iii, 16–18) cannot have any foundation. The transliteration נֶכֶד הַמֶּלֶךְ (" grandson of the king " or " of the seed or posterity of the king," Latin *nepos*), which has been adopted by Torczyner, is incorrect, for the Phoenician characters point, not to נֶכֶד, which occurs in the Biblical record only in connection with נִין (" offspring "), but to עֶבֶד (" servant "), as Albright, Ginsberg, Yeivin, and others hold, and the royal Nedabiah had probably no connection with this " servant of the king." After carefully and repeatedly studying the Phoenician characters in Messrs. Ilford's excellent photograph, I have no hesitation in regarding the word as עֶבֶד. One has only to compare the second letter of it with the second one of הָבִא (at the end of the same line) to be assured that it is a ב, not a כ. The latter was generally written longer, as may be seen in the word עבד in the last line, where both letters occur together. The expression עֶבֶד הַמֶּלֶךְ was a common one, denoting a court official (*cf.* 2 Kings, xxii, 12 ; 2 Chron. xxxiv, 20). Torczyner's translation, too, strains the sense of the text, for the word *king* can only refer to Zedekiah, who was reigning at the time, and not to his brother Jehoiakim. To avoid this difficulty, Torczyner finds it necessary to adopt the view, a very doubtful one, that נֶכֶד may have been used for " grandnephew " as well as " grand-son."

If further argument be needed, it should be remembered that the royal Nedabiah was probably not born by the end of his father's reign (Jehoiachin or Jeconiah). Jehoiachin was only eighteen years of age (or eight according to Chronicles) when he was carried off to Babylon (2 Kings, xxiv, 8), *c.* 597 B.C., and as he is stated to have had seven sons before he died (1 Chron. iii, 17, 18, RV), of whom Nedabiah appears to have



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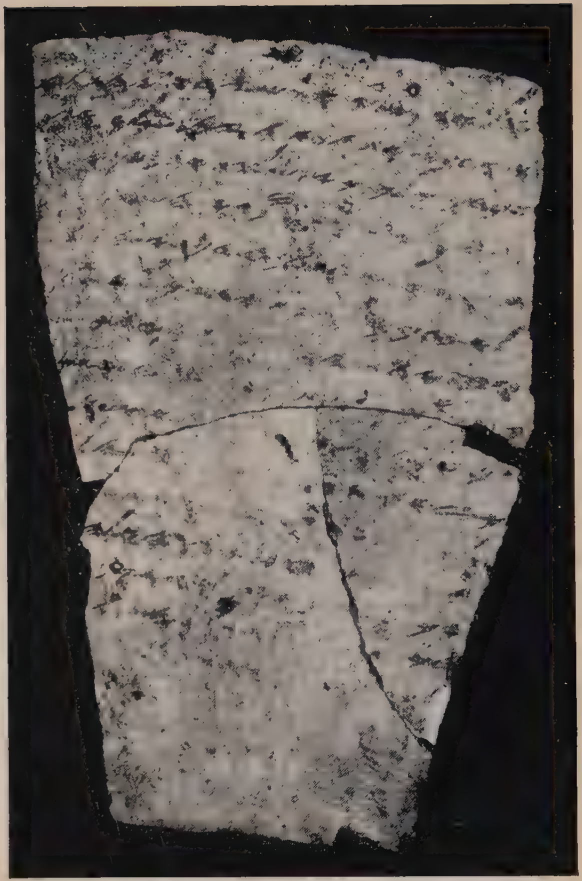
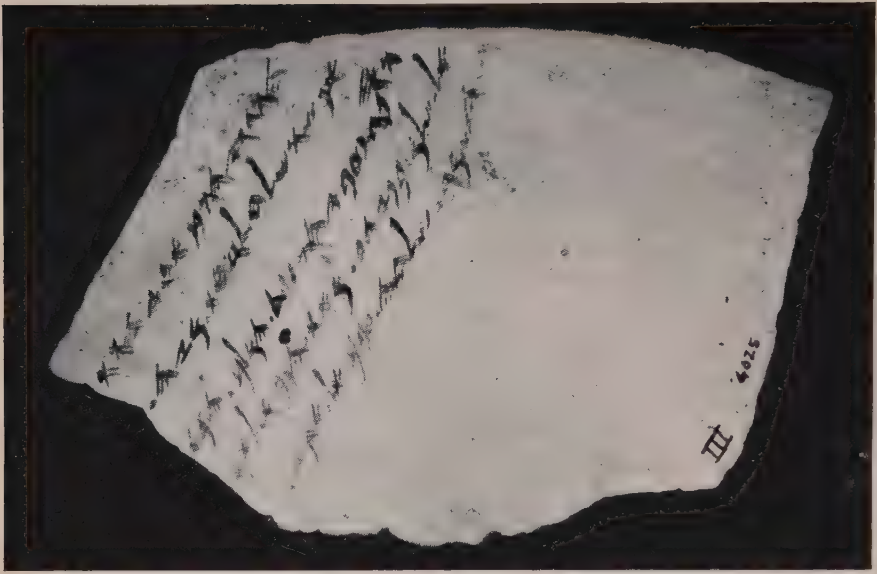


VI



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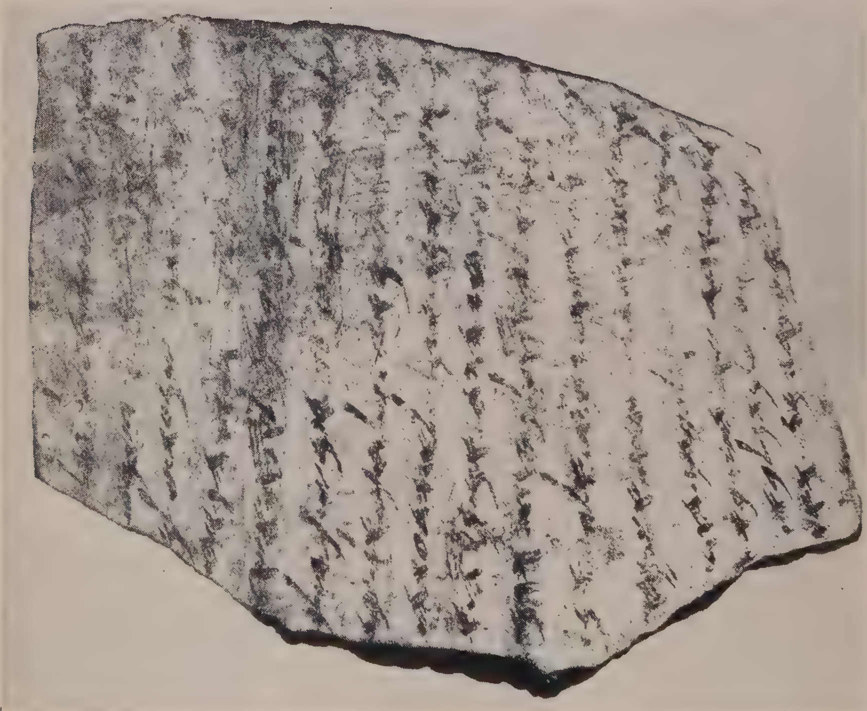
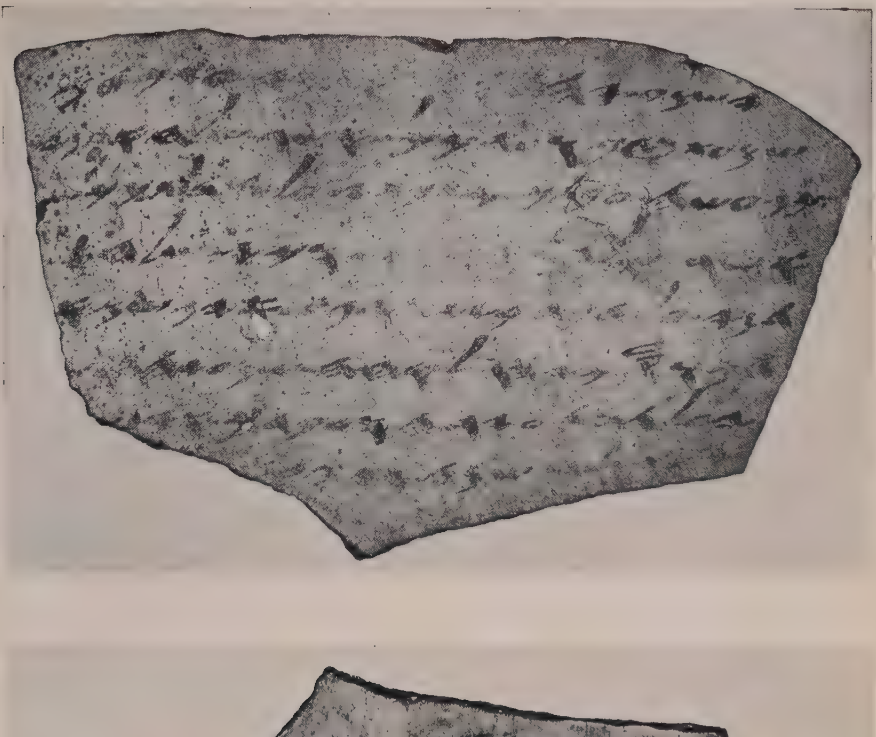


III



IV

been the youngest (judging from the Biblical order of the names), it is improbable that this last one was born till many years after his father's deposition. The only escape from this conclusion is to assume, as some supporters of Torczyner's view do, that there must be " some confusion " in the Biblical list of the sons, and that several of them—the four last, it is suggested—were not sons of Jehoiachin, but his brothers or cousins. But is there any need for such a drastic alteration in the Biblical text, in an endeavour to support an erroneous theory ? The probability, indeed, is that Jehoiachin was without children when he was taken captive (*cf.* Matt. i, 12), and that some of his children were not born till thirty-seven years later when he was released from prison (560 B.C.). The names of several imply this, or at least are appropriate only to such circumstances. *Cf.* Pedaiah (" Yahweh hath redeemed "), Jekamiah (" Yahweh hath raised "), Hoshama (" Yahweh hath heard "), Nedabiah (" Yahweh hath impelled "). If we assume that Nedabiah was the first-born son (though this is most unlikely), he might, of course, have been about ten years old by the end of Zedekiah's reign, but even at this age he could hardly have been entrusted with a written message on an important political mission. Besides, Letter III, in which his name occurs, is one of the group which Torczyner, in accordance with his theory of Uriah, dates " a few years " before the end of the monarchy, and this would make him a mere child of five or six at the time.

OLD AND NEW SEMITIC TEXTS

By G. R. Driver
(*Magdalen College, Oxford*)

I. From the late Rev. Prof. A. H. Sayce's Papers

Among the late Prof. Sayce's collections there were found an impression of a Syro-Palestinian seal in red wax and a squeeze of an Aramaeo-Arabian inscription.

The seal itself (Fig. 1 ; height $\frac{9}{10}$ inch, width $\frac{3}{5}$ inch) has not been found nor has any document come to light showing either whence it comes or where it now is. The figure engraved on it in the Perso-Phoenician style is that of a bearded man of priestly appearance, seen in profile, wearing a long robe which reaches to the feet and standing in an attitude of devotion before a base or altar behind which a wall rises and on which the spade[1] of Marduk is set up[2] ; on the opposite side, at the back of the figure, the legend לאחימן "(belonging) to Ahiman" runs from top to bottom. This name is borne by two persons in the Old Testament, the one a son of Anak[3] and the other a Levite,[4] but there is no evidence by which this Ahiman can be identified with any known person.

The squeeze (Fig. 2 ; height $4\frac{1}{2}$ inches, length 5 inches) bears an Aramaic inscription which appears to be a blundered form of one found by Huber at Teimâ in Arabia (dated *c.* fourth century B.C.) and now preserved in the Louvre[5] ; these two texts here set out beside one another for purposes of comparison are to the following effect :

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[1] Sum. *MAR*=Acc. *marru*(*m*)=Lat. *marra* (s. Contenau *Manuel d'Archéologie Orientale*, vol. i, p. 162, fig. 99b, and pp. 339–340).

[2] Cp. Diringer *Iscrizioni antico-ebraiche palestinesi*, p. 246, no. 90.

[3] Num. xiii 12, Joshua xiv 14, Judges i 10.

[4] 1 Chron. ix 17.

[5] Cooke "N.-S.I.," p. 199, no. 70.

Huber	Sayce
[מ]יׄתבא זי קרׄ	מׄעׄנׄ (ב)ר עמרן
[ב] מענן בר עמ	מׄיׄתבא זי קרב
[ר]ן לצלם אלה	א לחיינפשה
א לחיי נפשה	לצלם אלה

"the seat which Ma'nān son of 'Amrān offered to the god Ṣalm for the life of his soul."

I can only suggest that Sayce's copy comes from a mason's incorrect essay rejected in favour of Huber's correct inscription, which must represent the stone erected by the suppliant. Even so, in spite of its mistakes both in the spelling and in the order of the words, Sayce's text is worth publishing as it confirms the suggested restorations of the damaged original inscription.

II. In the Ashmolean Museum, Oxford

The Ashmolean Museum possesses fragments of three Phoenician or Punic inscriptions which offer texts of some interest, though all unfortunately more or less damaged. The first inscription has already been published, but without a facsimile, and is therefore here re-published with a photograph, while the other two inscriptions are here published for the first time.[1]

The first (Fig. 3; length $5\frac{5}{7}$ inches; numbered C111),[2] which Prof. Myres brought back from Larnaka Batsalos in Cyprus, is incised on the rim of a bowl or vessel of marble and runs:

. . . אׄדני בדמלקרת בן מכלעׄ[זר . . .

"... his lord Bod-Melqart son of Mikal-'a[zar[3] ..."

Both beginning and end of the text appear to be lost.

The second (Fig. 4; height $4\frac{1}{10}$ inches, length $2\frac{3}{10}$ inches;

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[1] I am indebted to the courtesy of the Keeper of the Ashmolean Museum for permission to edit these texts and to that of the Assistant Keeper for assistance in obtaining the photographs.

[2] Cp. Myres in the "Journ. Hell. Soc.," vol. xvii pp. 171–172, and Frothingham & Marquand in "Amer. Journ. Arch.," vol. xi p. 142.

[3] Cp. *R.É.S.*, p. 117, no. 1516, for this restoration of the name.

numbered 1933/1522), which came probably from Carthage and was bequeathed to the Museum by Mrs. Pope, is engraved on a block of limestone and runs :

לרבת לתנת פן ב̣[על ולאדן בעל]
חמן אש נדר עבל [בן]
עזרבעל . . . .

" to the lady Tanith the face of Ba['al and to the lord Ba'al]-ḥammān : (votive tablet) which 'Abal[1] [son of] 'Azar-ba'al has vowed. . . ."

How this text originally ended cannot now be said.[2]

The third (Fig. 5 ; height, 2 inches, length 2 inches ; numbered 1886/749), which came from Carthage and was given by Sir A. J. Evans to the Museum, is also engraved on a block of limestone and runs :

. . . בעלחנא מה[רבעל . . .

" . . . Ba'al-ḥannâ and Maha[r-ba'al[3] . . ."

I suggest these last two names with the greatest diffidence, the first because of the peculiar form of the ח (if it is rightly so read) and the second because of the uncertainty about the first two and the loss of the remaining letters ; traces of another line above this can be seen but no sign can be made out.

III. ON MR. J. L. STARKEY'S TWO SEALS FROM TELL ED-DUWEIR

Before his lamented death Mr. Starkey published in " Q.S." (vol. lxviii, pp. 188–189 ; pl. VI., figs. 1–2) two seals lately found at Tell ed-Duweir, together with photographs of impressions on clay giving their legends, which he also transliterated ; but an examination of the two photographs has led me to the conclusion that he has misread the names on them.

On the first (Fig. 1) he reads " for Shaphan the son of Zariyahu," which is certainly wrong ; for ש with rounded bottoms does not seem to occur before Hasmonean coins, and even then it never lies on its side with the top towards the right and the bottom towards the left hand. The letter can only be צ, formed exactly as on other Israelite seals, and the name is therefore צפן, as found on another seal from Tell el-Judeideh[1]; the second name is obviously the well-known עזריהו, divided between the two lines. The text then may be read

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[1] Cp. *C.I.S.* vol. i no. 636 l. 6 and no. 2073 l. 6.

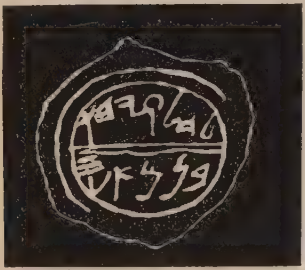
[2] Cp. Cooke *op. cit.* pp. 131–134 nos. 48–49, which represent two types of this class of votive inscriptions.

[3] Cp. Harris *op. cit.*, p. 116, for the restoration of this name.

צפן ע
זריהו

without an introductory ל "belonging to," for which there does not seem to be room, and without בן "son" between the names of father and son.

On the second (Fig. 2) he reads "for Hilkiah the son of Maas," which too cannot be accepted out of hand. It is a small matter that the first name is not חלקיה "Hilkiah" but חלקיהו "Hilkiyahu," since the two forms represent but different spellings of the same name. The second name, however, if read מאס, is very difficult; for not only is no such name known, but also there seems to be no Semitic root yielding a suitable sense from which it can be derived. Further, between the second and third letters as shown on the accompanying print which Mr. Starkey sent me there appears a



SEAL FROM TELL ED-DUWEIR

stroke sloping vertically from the right to the left side, i.e. from the top of the א towards the bottom of the ס; and in the photograph the top of this stroke seems to be joined to the lowest horizontal line of the ס. Dr. Sukenik, however, who has examined the original seal for me in Jerusalem, writes that " between the second and third letter I can only see a diagonal line . . . but I was unable to distinguish a line connecting this supposed letter with the upper part of the ס." It has therefore occurred to me that this stroke represents an imperfectly cut letter, possibly a פ ; yet it must be admitted that Dr. Sukenik goes on to say that " if such a line ever existed, it is impossible to ascertain now whether the whole formed the letter פ as you suggest or the letter נ." Assuming, however, that this stroke or line is a bungled letter, I suggest tentatively (as I can make nothing of מאנס) that the name may perhaps be מאפס " Me'appes " meaning " he who brings to an end "[1] (whether God or the newly born child to whom the name is given) *sc.* the disgrace of childlessness.[2] The correct reading, therefore, will be

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[1] Cp. Diringer *op. cit.*, pp. 121–122, no. 4, where this letter is exactly so written in the Hebrew צפן; the Acc. *Ṣapanu* (Johns "A.D.D.," vol. i p. 161 O. 2, no. 215, R.8) shows that this is a genuine Semitic name, here obviously a form of צפניה(ו).

לחלקיהו
בן מאפס

if the doubtful stroke is so explained. Possibly future discovery will bring another seal with the same name quite clearly written, and the exact reading must remain till then uncertain.

IV. A NEW PHOENICO-ARAMAEAN NAME

Mr. Reifenberg publishes in the last number of " Q.S." (vol. lxx p. 115) an interesting Judaean seal bearing the legend אדתא אשת פשחר, duly remarking that אדתא is a new name and accordingly leaving it unexplained. It is clearly the Phoen. אדת " mistress " (the fem. form of the masc. אדן " master ")[3] with the Aramaic emphatic ending, used like the Aram. מרתא " lady ; Martha " as a proper name ; probably therefore the woman who owned the seal was of Syro-Phoenician origin.

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[1] Cp. מְנַחֵם " he who comforts " and מְנַשֶּׁה " he who brings forgetfulness " (Gen. xli 53) as similarly formed names.

[2] Cp. Gen. xxx 23 and Isa. iv 1 for the joy of being relieved of the shame of barrenness. The same explanation has been proposed for אסף but has been disputed (s. Noth *Isr. Eigenn.* pp. 181–182).

[3] Cp. Harris *op. cit*, p. 74.

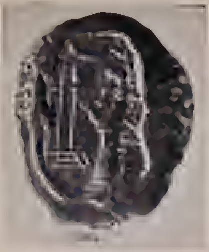

Fig 1

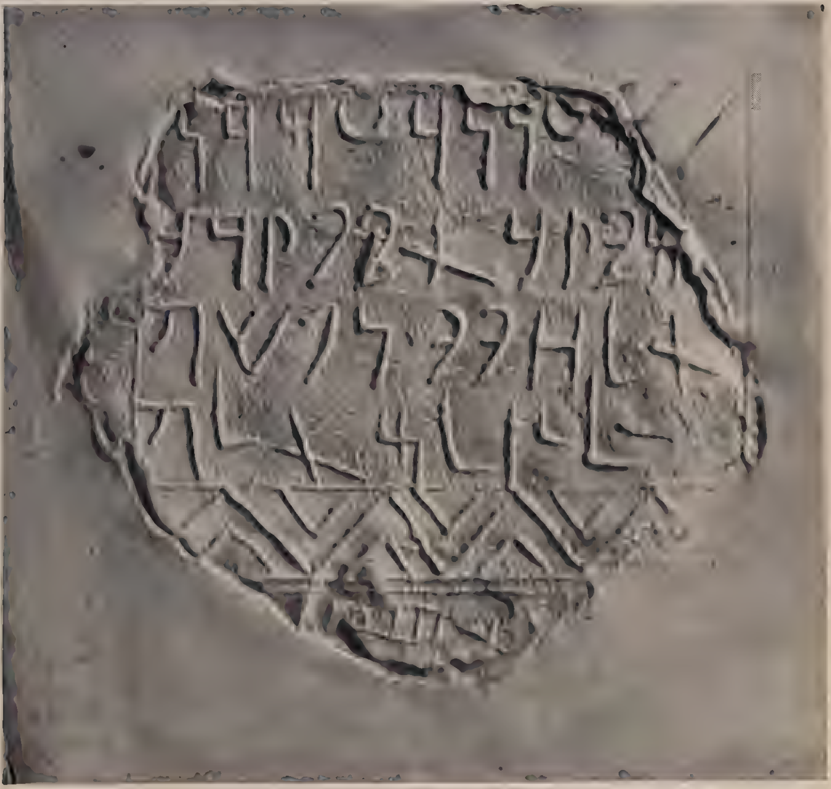

Fig. 2

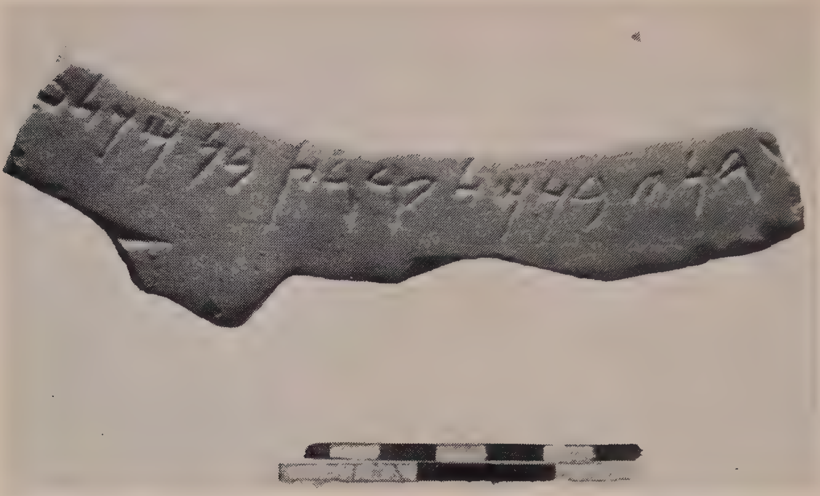

Fig. 3

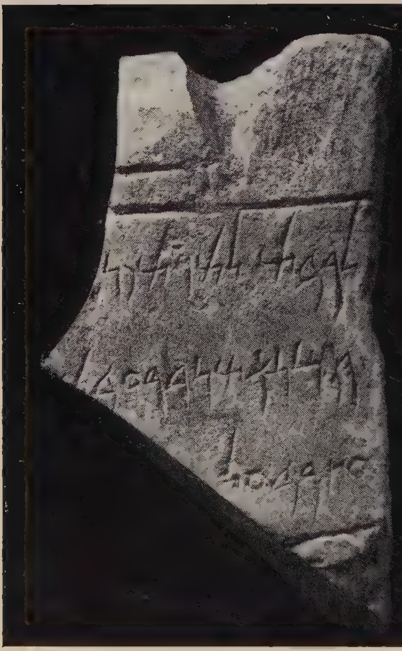

Fig. 4

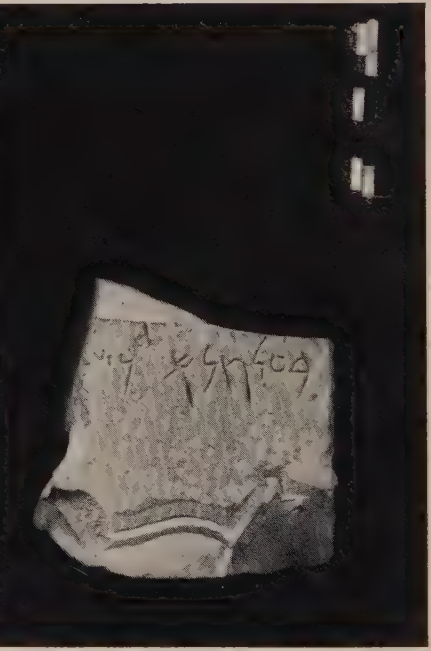

Fig. 5

OBITUARY NOTICE

Louise Baldensperger died on April the 19th, at her brother's house in Jaffa, at the age of seventy-six, and was buried at Jerusalem, in the Cemetery on Mount Zion, next to her parents. They came originally from Alsace, with the same determination as others of a group of missionaries of the period, to "dwell among the people of Palestine, supporting themselves there by the labours of their hands and endeavouring to show forth what the life of a Christian should be." The parents held true to their ideal and passed it on to their children. When they were gone, Louise Baldensperger decided to live on in their little country house at Artas, although her brothers would gladly have had her to live with one or other of them. "But how will you support yourself ?" asked some "and how can you live in a Moslem village ?" But she, being compounded of courage and ingenuity, found a way, or, rather, many ways, of earning a living and even of helping those around her who were poorer than herself.

When I first knew her, in 1927, she was already an old inhabitant of the village, affectionately known there as "Sitt Luise." She was indicated to me as one who knew and loved the village folk, and who had a rare understanding of their language, manners and customs, and who further knew much about the flowers of the district. To this Palestinian village came Bible students, linguists, botanists and others in search of information who went away with packed note books, part obtained from her and part through her. For because of her friendship with the people of the village, studies of serious scientific value could be carried on there. Hilma Granqvist remarks in her book on *Marriage Conditions in a Palestinian Village* how especially favourable the conditions in Artas were for ethnological study. "It was of inestimable value to me," she writes, "that my colleague, Louise Baldensperger had actually lived in the village for more than thirty years . . . through her I won almost immediately the trust and sympathy of the people, so that they were willing to allow me to take part in everything and to give me all the information I desired."

My interests at the moment being chiefly botanical, I first went to Artas to learn from Louise the local plant names and their uses. This grew into our collaboration over *From Cedar to Hyssop* a study in plant folk lore. She spoke and I wrote. That was the way of it, but how to convey the excitement of this procedure ? Her conversation was so rapid and so vivid, so full of curious happenings and witty saws that I longed for some equally rapid way of taking it down. I made notes and rewrote them and read them to her again, and sometimes the result was commended with delight, and sometimes amended by some salty criticism. It was not perfect, often a poor echo of the spirit and savour of her talk but she could not be induced to write herself, either in French, German, or English though she could converse in all three. Nor did she know Arabic in a literary form, but talked it as any child of the country might, with knowledge both of dialect and more elegant speech. To travel with her in an Arab bus was an experience. How many acquaintances she would find and how many new friends she would make too, before the journey ended !

Her attitude to the people interested me very much. She was shrewd, and had no illusions about village life, she knew well its crudities, and harshness, but she knew too that virtue was to be found there, and was passionately anxious that her visitors should not despise the fellaheen as beings without ideals. " Write down," she said to me, " how good the people of this village are to the blind and the infirm. At Ramadan they give enough to keep them all the year round, although they are so poor. In the month before harvest all here go hungry. Then, as they say, " the mouse goes away disconsolate from the house of the fellah." She liked their courage, of which she herself had plenty and her strong sense of humour chimed with theirs. She was no prude, and people spoke their minds to her, but I have seen her, when a story grew too broad, disconcert an avid folk lorist by shutting up her note book and remarking firmly : " Such stories I do not write down." She was very conscious of the village need of more work and wider interests, and was glad when she could offer some small bit of employment, in gathering and pressing of plants for her herbaria and flower cards and the like. She claimed too that it was her family which had introduced a superior variety of apricot into the gardens of the valley.

When *From Cedar to Hyssop* was finished I took down many folk tales from her, and I am glad that she saw them in type, though not, alas ! in print.

Her letters in recent years showed sadness over affairs in Palestine, though even here her invincible gaiety broke through. How she delighted in the good moment when the strike ended and the boys who formerly ran through the streets of Jerusalem crying : " Shut, shut the shops " now cried " Open, open ! " "And then," she wrote, "all the gramophones which had been silent for six months began to play. See Ps. cxxxvii. 2." And, in another letter, "Peaceful atmosphere, I feel I must let you know, you, the friend of Palestine, Arab and Jew. Faces are happy to-day, may it last, ya Rabbi . . . " Her constant theme was how much Jew and Arab might help each other if they would. " One hand cannot clap alone " she would quote.

Latterly she lived much in Jerusalem, renting a little room on a roof with a view over the Old City. After last Christmas her dear 'Aliya, who had lived with her at Artas, died, and " Sitt Luise " returned no more to the village, but, grieving, went for rest and comfort to her brother's house and there passed from us. I cannot think of her as resting, she had too much zest in life. She was, I think, very like those Early Christians who surprised the Pagans by their gaiety in a cruel world. Louise, like them, seemed : " always happy, always in spring time."

GRACE M. CROWFOOT.

REVIEWS AND NOTICES

Handbook for the Study of Egyptian Topographical Lists relating to Western Asia, xv + 223. By J. Simons. Frontispiece, 6 figs., 23 pls. and 36 diagrams. E. J. Brill, Leyden, 1937.

A Catalogue of Egyptian scarabs, scaraboids, seals and amulets in the Palestine Archaeological Museum (Government of Palestine, Department of Antiquities). By Alan Rowe. Imprimerie de l'Institut français d'archéologie orientale. Cairo, 1936. xlviii + 347, xxxviii pls., graphs, diagrams and a map.

The importance in antiquity to Egypt of Palestine and Syria is frequently overlooked by scholars. Repeatedly the Egyptians were obliged to conduct campaigns there and the official accounts of captured cities which begin under the eighteenth dynasty provide us with much valuable information. Dr. Simons has brought together and re-edited all the known lists of Asiatic places in royal monuments, and has added bibliographical references, diagrams and an index of the places with their Semitic equivalents where known. Not all these lists are of value as objective historical accounts, as Dr. Simons admits. Such a claim could be made with partial truth for the records of Thothmes III, Seti I or even Shishak. But the conquest of most other Pharaohs were never made at all. They had come to be included as forming a necessary part of oriental flattery and court etiquette. It is even possible in many cases to recognize in the lists of these lesser men plagiarisms from the records of Thothmes III or other conquerors. Nevertheless they still possess value for us by reason of the geographical information they contain. Much still remains to be done on this aspect of the subject, and Dr. Simons' book will greatly facilitate the doing of it. Studies, too, of the anthropological types represented on these monuments will also be much stimulated by this work. It is in fact the most comprehensive study of these texts which has yet appeared, and in almost all respects deserves the highest praise. As it appears, however, much of the transcriptions were made from photographs. There thus still remains the possibility of filling some of the damaged passages in the texts by fresh readings based on first-hand collation of the monuments. The only other possible ground for criticism is that no reference to *Dussaud's Topographie Historique de la Syrie antique et mediévale* is included.

It is to be hoped that Dr. Simons will keep his promise, given in the introduction, to produce a companion volume to this, dealing with the Asiatic place-names mentioned in literary texts. It is rumoured that he also contemplates a work on the African place-names. Both will be most welcome.

The thousand or so scarabs found in Palestine (mostly since the War) furnish an interesting and unbiased commentary on the accounts of the Egyptian Kings to which we have referred, and illustrate the true extent of Egyptian penetration ranging from the twelfth to the twenty-seventh dynasty. Royal scarabs in Palestine become noteworthy by their number first in the thirteenth dynasty then abundant under the Hyksos, the only other times when they are common being under Thothmes III, Amenophis II and III and Rameses II. There appears to have been a later revival of Egyptian interest in Palestine, but to a lesser extent, under Shishak (twenty-second dynasty)—Ra-meny (twenty-fifth) and Psamthek I (twenty-sixth). Mr. Rowe has included in his introduction as complete as possible a catalogue of instances of contact between Palestine and Egypt which too it is interesting to compare with the royal lists of Palestinian cities in Dr. Simons' book.

In his plates Mr. Rowe has tried a new and more detailed method than is usual, for classifying the differing features of scarabs of different dates. It will be of great service to laymen, who will be surprised to learn that so much variety is possible in an object of so small a size. R.D.B.

Let my People go. By R. F. MARTYN and W. F. SYNGE. (Murray, 7*s.* 6*d.*, 1937.)

It is a little difficult to know for what kind of reader this book is intended. It is obviously not suitable for children : is it meant to be read as a novel by adults ? The reconstruction of the story of Moses and the Exodus is not at all convincing. The authors place the Exodus in the reign of Merneptah; they do not apparently know that the Feast of Unleavened Bread was not at first connected with the Passover; a rationalizing explanation of the Ten Plagues is produced. It may be remarked that "Bint Anath" is a Semitic, not an Egyptian, form; the Hittite King's name was Hatussil, not Khatassil; Byblos appears on page 164 as "Biblyos," and on page 307 as "Bibylos"; "Joc̱ebed" is an impossible transliteration of the Hebrew. A little more acquaintance with ancient history and archaeology would have saved the authors from some of these mistakes, but they show also that they cannot get back to the spirit of the second millennium B.C. The atmosphere is all wrong. If the ancient stories must be rewritten, is it necessary to use modern slang? "Get out," "on his own," "mind his step" are very incongruous expressions. And the thought represented is much too modern. The contrast between body and spirit, the argument as to cause and effect, the idea of God the Creator working through physical laws are all anachronisms. There is a good deal of careless writing: "Could King Ulu explain a rain shortage in Ethiopia would mean drought in the Delta?" "How sad religion and profit go hand in hand," "From the sublime of religious fervour." There are also several misprints: p. 33, "murrian" for "murrain"; p. 144, "sardonix" for "sardonyx"; p. 270, "hysop" for "hyssop"; and what *is* "meningococcal meningitis," of which the Egyptian firstborn are said to have died?

Unless stories of the ancient world are very carefully written, with a thorough knowledge of the background, both of life and thought, they do not really serve a useful purpose.

E. W. HIPPISLEY.

The Committee have to acknowledge with thanks the following:

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The Historical Background of the Bible, by J. N. Schofield. Nelson.

The Old Testament and Modern Discovery, by S. Caiger. S.P.C.K.

The Tenure of Land in Babylonia and Assyria, by Rachel Clay. University of London, Institute of Archaeology : Occasional Paper I.

Report of the United States National Museum, 1937.

THE
PALESTINE EXPLORATION FUND

NOTES AND NEWS

At this season of the year the archaeologists, having gathered in their harvests and exhibited them to the public, whose interest in the gradual unveiling of the ancient world is steadily increasing, are now preparing to return to their labours in the field. This issue contains two important records of work done in Palestine during the past season. The account of the work at Tell ed-Duweir, bravely carried on by the late J. L. Starkey's devoted company, is full of interest. The exhibition, held in July, of the results of the past season's work, was an immense success, and reflects the greatest credit on those members of Mr. Starkey's party who so skilfully organized it. In the short period of its continuance over 2,000 people visited it. Owing to the unsettled state of Palestine it is possible that the coming winter may be devoted to the preparation of the formal report of the work of the expedition since its beginning, a most necessary and important task, and one which has been well inaugurated by the publication of the splendid volume entitled *Lachish I*, containing the transcription and translation of the now famous *Lachish Letters*, with full commentary, by Professor Torczyner.

In his Presidential address to the Anthropological section of the British Association, at its meeting held in Cambridge last month, Professor V. G. Childe said some striking things about the extent to which progress in archaeology has demonstrated the dependence of the early stages of civilization in Europe upon the ancient Near East. He also brought out the importance of early Anatolian civilization as a bridge between Asia and Europe. Readers of Farnell's *Greece and Babylon* will realize what changes archaeological discovery has made in the picture of the ancient world. One passage in Professor Childe's address is worthy of special note: "The high absolute antiquity of Oriental civilization has been very dramatically confirmed by excavations in Mespotamia and Syria and Anatolia. Opportunities for applying the criteria, already enumerated, to the possibility of diffusion between the Orient and Europe have been multiplied. Discoveries in Anatolia at Alishar, Alaca, Kusura, Thermi and Troy have in fact revealed long-missing links between Mesopotamia and the Aegean. Heurtley's work in Macedonia, taken in conjunction with the publication of the relics from Vincã, has established the continuity of neolithic culture from the Aegean to the Danube. We no longer have to compare two remote areas separated by an ambiguous tract of unexplored territories, but can survey a continuous province over which cultural phenomena interlock from the Tigris to the Rhine." It is well for those who are specially interested in the archaeology of Palestine to be reminded how vitally the history of civilization in Palestine and Syria is bound up with the larger movement of civilization revealed by recent advances in archaeology.

The importance of M. Parrot's excavations at Mari becomes clearer with the results of each fresh season's work. The translation of the large store of tablets found in the archives of the city is rapidly proceeding, and is throwing great light on the history of upper Mesopotamia in the period of Hammurabi. Among the nomads threatening the borders of the settled region round Mari appear our old friends the Habiru, and a new and unexpected name in this connection, the *Bene-ia-mi-na*, the Benjaminites! A further point in this connection is the occurrence, in several passages of the correspondence contained in these tablets, of the term *dawidum*, which is none other than the Hebrew *David*. Here, however, it is not a proper name, but a title having the meaning "chief," or "head-sheikh," of a tribe or village. Zimrilim, the king of Mari, is said to have killed the *dawidum* of the *Bene-ia-mi-na*. This very interesting fact is likely to cause some discussion among scholars. Here we shall content ourselves merely with recording it.

In his valuable monograph entitled *The Ras Shamra Tablets : their bearing on the Old Testament*, Dr. J. W. Jack gave a list of parallels between the Ras Shamra texts and the Old Testament. Professor Ginsberg has recently drawn attention to a remarkable parallel between a passage in the new Epic of Danel and a difficult verse in David's lamentation over Saul and Jonathan. In the Danel text, Danel, in his lament for the death of a friend, says : " Seven years may Baal (i.e. rain) fail. . . . (Let there be) no dew nor rain, nor upsurging of the Deep." In David's lament we have the words : " Ye mountains of Gilboa, let there be no dew nor rain upon you, nor fields of offerings." The difficult expression " fields of offerings " may be restored, as Professor Ginsberg suggests, with the help of the Ras Shamra passage, to yield the same meaning, " the upsurging of the Deep, i.e., of the subterranean springs."

Dr. Jack's comment is significant : " The identity, moreover, shows that David, if he was the author of the lamentation referred to, had some knowledge of the old Canaanite literature, written at least four hundred years before his day. It is probable that such literature circulated throughout the land, and its spread was aided by the remarkable commercial activity that went on from Phoenicia. Much of the literature (history, epics, mythology, etc.) must have been well known to the Israelite schools of the prophets, and hence the numerous cases of identity of expression on the part of the latter."

PALESTINE FOLK MUSEUM. Opportunity is being taken of the presence in England of the Secretary of the Palestine Folk Museum to hold a series of displays of Palestine costumes. These will serve to demonstrate the progress which has already been made in collecting material. For the purchase of these articles the Committee has been able to raise sufficient funds in Palestine by means of public appeals, the organization of entertainments and so forth. The Palestine Administration has provided accommodation for housing the exhibits. The work of collecting, maintenance and cataloguing has hitherto been carried out entirely by voluntary helpers : this cannot, however, continue indefinitely. Funds must therefore be raised to provide the salary for a full time curator. The sum required cannot be collected in Palestine; it is hoped that these displays will increase the number of those who are interested in the museum and thus contribute to the achievement of the aim which the Committee has set itself.

The first exhibition was held at Norwich on 16th September, and attracted a large audience.

A second exhibition took place at the rooms of the P.E.F. on 28th September, when Mrs. Barbour, assisted by a number of friends, gave a most interesting and instructive display of the many types of costume still worn by the natives of Palestine. Owing to the national crisis the audience was a small one, but those who were present thoroughly appreciated the delightful demonstration of beautiful costumes and of the way in which they were worn, so skilfully arranged by Mrs. Barbour and her helpers. The chair was taken by Mr. Crowfoot.

P.E.F. LECTURES. The following lectures have, so far, been arranged for the Session 1938–39, and we hope to announce others in the January *Quarterly*:

Wednesday, 26th October, at 4.30 p.m. A MAP OF PALESTINE OF THE CRUSADES. By F. J. SALMON, C.M.G., M.C. (Late Commissioner for Lands and Surveys, Palestine).

Wednesday, 30th November, at 4.30 p.m. PRESENT-DAY KNOWLEDGE OF THE HITTITES. By PROFESSOR S. H. HOOKE.

Wednesday, 25th January, 1939, at 4.30 p.m. EXCAVATIONS IN PETRA. By DR. MARGARET MURRAY.

ARCHAEOLOGICAL EXPLORATION IN THE SOUTHERN DESERT

By George Eden Kirk

The first season's work (1937–38) of the Archaeological Survey of Palestine has been done in two separate regions, Sheet 7 of the new 1 : 100,000 map, which comprises the country about Tel Aviv and Jaffa, and the north-eastern part of the Southern Desert. This paper is a first report of findings in the latter region. The staff consisted of P. L. O. Guy, director ; G. E. Kirk, archaeological assistant ; D. Bellerby, architect ; and Muhammad Barakat of Gaza, general assistant. Travelling was done mainly on camels hired at Beersheba. We have to thank Mr. Flanagan, Superintendent of Police at Beersheba, for his co-operation.

The best map of the Southern Desert is the 1 : 125,000 map of the Sinai Peninsula made in 1913–14 by Colonel, then Captain, S. F. Newcombe, and published by the War Office. Before him the most important travellers in this region were E. H. Palmer[1] and Alois Musil.[2] In connection with his survey C. L. Woolley and T. E. Lawrence made an archaeological journey which was published as the Palestine Exploration Fund Annual for 1914–15 with the title of *The Wilderness of Zin*, and has recently been reprinted. This work attempted for the first time to give a connected account of the archaeological history of the Southern Desert, and the essentials of the account are not likely to suffer radical change. But an examination of their route shows that they, like their predecessors, confined their attention almost entirely to the towns of the open country to the west—Khalasa, Ruhaiba, Sbaita, Mishrifa, Abda, Auja Hafīr, Birein, Qadirāt, Kurnub. This area, where agriculture is still practised in many parts, is bounded on the east by a barren limestone range, which rises fairly gently from the west but falls abruptly and precipitously eastwards to the great rift-valley of the Araba. The scanty rain is carried from the greater part of the range to the Araba by many wadis (temporary watercourses), which have cut deeply into the limestone mass and provide routes of varying difficulty between the Mediterranean and the western towns on the one hand and Petra and Aqaba on the other. These routes had considerable economic and military importance in the Hellenistic, Roman, and Byzantine periods (say, 200 B.C.–700 A.D.), the time of this region's greatest prosperity; but the mountains through which they pass remained an archaeological Terra Incognita. Palmer indeed made a journey in the "Mountains of the Azazimeh,"[1] which seems to have given him little pleasure and produced little of archaeological value, and Woolley went from Qadirāt by way of Bir Hafīr to Abda and thence to Kurnub, but no further than a half-day's journey east of Kurnub. Even Musil penetrated these mountains comparatively little, and as his purpose here was exploration and map-making rather than archaeology he was generally content to record the minor sites without visiting them. The map of the Sinai Peninsula, which was made in a remarkably short time, corrects Musil's map in many particulars, but is less helpful in marking minor sites, and the next important advance in our knowledge was made by the two journeys of Fritz Frank from 1932 to 1934. Most of his work was done in the Araba and to the east of it, but two excursions in the Southern Desert produced three large and well-built forts and a large number of smaller sites. Professor A. Alt has applied his great knowledge of the ancient notices on the topography of the district to Frank's discoveries and has shown in the region with which we are concerned the existence of two previously unlocated Roman roads. One went from Jerusalem and Hebron to Aila (Aqaba) by way of Malatha (Tell el Milh) and Thamara (identified by Alt with the newly discovered Qasr el Jahainīya el Qibli), the other from Elusa (Khalasa) and Eboda (Abda) to the Araba and Petra by way of Wadi Rumān and Wadi es Sīq. This route was controlled by large forts at Qasr Mahalla and Moyet 'Awād, identified by Alt with the

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[1] *The Desert of the Exodus* (Cambridge, 1871).

[2] *Arabia Petraea*, II (Edom). (Vienna, 1907–1908).

[1] *Op. cit.*, II, 414 ff.

ancient Asoa and Asuada.[1] Though he was working single-handed Frank's topographical and architectural notes leave very little to be desired, but he is not an archaeologist, and though he usually noted surface pottery he evidently collected none. Consequently Alt had no archaeological evidence of dating to control his literary sources, but had to draw his inferences as to dating entirely from them. This was particularly unfortunate since important contributions to our knowledge of the pottery of the Hellenistic, Roman, and Byzantine periods in this region have recently been made by Mr. and Mrs. G. Horsfield at Petra, Dr. Nelson Glueck's explorations in Transjordan,[2] and especially by the excavations of desert sites made since 1934 by the Colt Expedition of the British School of Archaeology in Jerusalem, directed by H. Dunscombe Colt. T. J. Colin Baly, the assistant-director of the Expedition, has made an exhaustive study of the pottery from four sites, and is now able to distinguish several phases in the Hellenistic, Roman, and Byzantine periods.[3] He has generously offered the Archaeological Survey the use of his knowledge and experience. Our object this year has therefore been to revisit Frank's sites and check his results and bring back pottery for Baly's examination, and to continue Frank's work by exploring other likely lines of communication through the mountain region.

From Beersheba to Kurnub

There is a good motor road between Beersheba and Kurnub by way of Wadi Mshash and Wadi ʻArʻara, but for archaeological purposes it is more useful to take the direct camel track further south which joins the motor road at

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[1] *Aus der Araba*, (Leipzig, 1935), reprinted from the *Zeitschrift des Deutschen Palästina-Vereins* (abbreviated to *ZDPV*), LXVII (1934) and LXVIII (1935). The two excursions in the Southern Desert are described in LXVII (1934), 256–280, and Alt's commentary appears in LXVIII (1935), 1–78.

[2] *Explorations in Eastern Palestine*; *Annual of the American Schools of Oriental Research*, XIV (1933–1934) and XV (1934–1935); shorter preliminary reports have appeared in recent numbers of the *Bulletin of the American Schools.*

[3] He will shortly publish the first results of this work in the volume dealing with the excavation of Auja Hafīr.

Khirbet es Sirr. The valley of Wadi Mshash is broad and extensively cultivated with grain crops, but to the south is a limestone plateau which is cultivable only in the numerous wadis that drain northwards into Wadi Mshash. There are one or more rock-cut cisterns or wells in every wadi and the soil is good, but advancing stream-erosion is tearing the soil out of the wadis and leaving ugly channels where there were cornfields. The Arab cultivators of these wadis understand the value of the Roman-Byzantine terrace-walls built at frequent intervals across the wadis to catch the soil and prevent erosion, and try to imitate them, but they say they cannot afford to buy cement and their light walls of dry stone are easily carried away by the torrents. Our study of this interesting district has only just begun, and I must content myself here with a reference to the sketch-map (Fig. 1) and short descriptions of the sites :

Khirbet Ruwahaiya. On the lower slope of a small hill an area 25 × 20 metres seems to have been levelled. There is a cistern, Harābat Ruwahaiya, in the wadi of that name about 200 metres eastward. Coarse pottery of a ware that does not appear in the Roman-Byzantine towns and may be earlier, also some Roman-Byzantine.

Khirbet Abu Tlūl in Wadi Abu Tlūl. A building 25 × 20 metres razed to ground level. There is water at Harābat Abu Tlūl a half-hour to the north. The pottery consists largely of Roman-Byzantine cooking-pots (Baly's Ware XV). His Ware X, a finer Byzantine ware common at Sbaita, is also plentiful here. This site is probably the Khirbet Abu Tellul el Medhbah mentioned by the Survey of Western Palestine,[1] but the name is incorrect, for El Midhbah is a separate site 2 km. to the north.

El Midhbah is a hill, marked on Musil's map, which overlooks Wadi Mshash and divides Wadi Abu Tlūl from Wadi Umm Itnān. On its top is a building 20 × 18 metres razed to ground level, and immediately below it to the north are caves, one of which seems to have been a cistern. There is another dry cistern at the foot of the slope. The north slope is strewn with pottery which begins with Early Bronze (c. 3000–2100 B.C.), including a ledge-handle and rims of hole-mouthed jars

[1] *Memoirs*, III, 394.

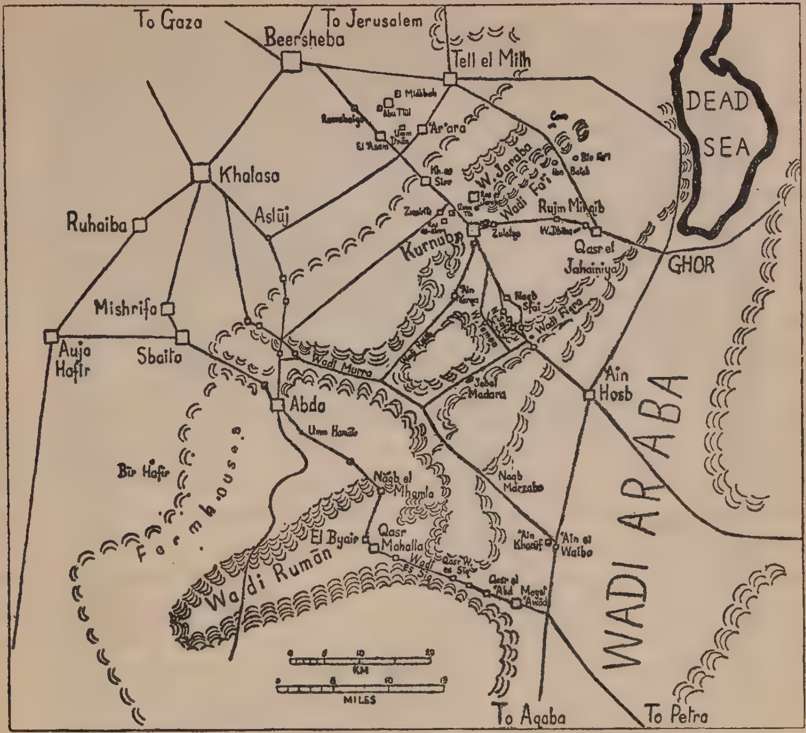
To Gaza
To Jerusalem
Beersheba
Tell el Milh
DEAD SEA
El Midbbeh
Abu Tlūl
Umm Itnān
'Ar'ara
El 'Asam
Khalasa
Kh. es Sire
W. Jaraba
Wadi Fa'i
Aslūj
Ruhaiba
Zuweira
Kurnub
Zulafa
Rujm Mihqib
W. Dhiba
Qasr el Jahainiya
GHOR
Mishrifa
'Ain Sharqa
Naqb Sfai
Wadi Fiqra
Auja Hafir
Sbaita
Wadi Murra
Jebel Madara
Abda
'Ain Hosb
Umm Hamda
Bir Hafir
Forehouses
Naqb el Mhamla
Naqb Marzaba
Qasr Mahalla
El Byair
Wadi Ruman
Wadi es Siq
Qasr W. es Siq
'Ain Khasif
'Ain el Waiba
Qasr el 'Abd
Moya 'Awad
WADI ARABA
KM
MILES
0
5
10
20
0
5
10
15
To Aqaba
To Petra

FIG. 1. GENERAL SKETCH-MAP. SQUARES INDICATE SITES, CIRCLES WATERING-PLACES

and sherds of "porridge-ware." The series apparently goes on through the Iron Age, and ends with Terra Sigillata, the Byzantine Ware X, and perhaps some Early Arab sherds. Pottery of most of these periods was found on the silt-heap of the upper cistern.

Khirbet el 'Asam, near the head of Wadi Abu Tlūl, is a very extensive group of low mounds with three dry cisterns. Remains of a pavement with red and white tesserae. The pottery consisted mainly of pseudo-sigillata wares, but no "Nabataean"[1] was found as at 'Ar'ara.

Khirbet Umm Itnān. Several enclosures on the slopes above Wadi Umm Itnān, which is well watered and contains good cultivated land. Pottery, Roman-Byzantine.

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[1] On "Nabataean" pottery see at present Glueck, *op. cit.*; G. M. Crowfoot, *Quarterly Statement*, 1936, 14 ff.; J. H. Iliffe, *Quarterly of the Department of Antiquities of Palestine*, VI (1936), 15 ff.

‘Ar‘ara. A group of wells in Wadi ‘Ar‘ara is commanded on the south-west by a hill four to five hundred metres long and about 100 wide which was apparently surrounded by a wall. The pottery includes ring-burnished haematite sherds of the Early and Middle Iron Age (c. 1200–600 B.C.), but no Late Iron Age (600–300 B.C.) pottery was seen. There is a good deal of painted " Nabataean," and Roman-Byzantine ribbed sherds are common. The site has been identified with the Old Testament Ararah, less probably with Aroer.[1] In the valley are the walls of an extensive Roman-Byzantine site which requires air-photography to make it intelligible.

Khirbet es Sirr, situated in an important position where the direct track from Beersheba and Khalasa to Kurnub is joined by the track from ‘Ar‘ara and Tell el Milh. The main building is 63 × 26 metres with outlying buildings extending for some 200 metres. Pottery, Roman-Byzantine. Water was obtained from the well built reservoir " Qasr " es Sirr 200 metres to the east.[2] There seems also to have been a well or cistern on the site. The entire course of Wadi es Sirr as far as its head is cultivated and fertile. The main wadi and its tributaries are filled with ancient terrace-walls and must have been intensively worked. There are a number of low mounds along the road which perhaps hide the ruins of ancient farm-houses.

Musil and Woolley have planned and described KURNUB, the most easterly of the large towns,[3] but they do not always agree and Bellerby has therefore made a new plan of the town (Fig. 2). We hope to deal later with the constructions outside the town, which are very interesting, by an extended survey based on air-photography. The East Church, which Woolley planned, has in spite of the Antiquities Law been disgracefully plundered recently to build the police-station which now adjoins it, and a building immediately west of it has been

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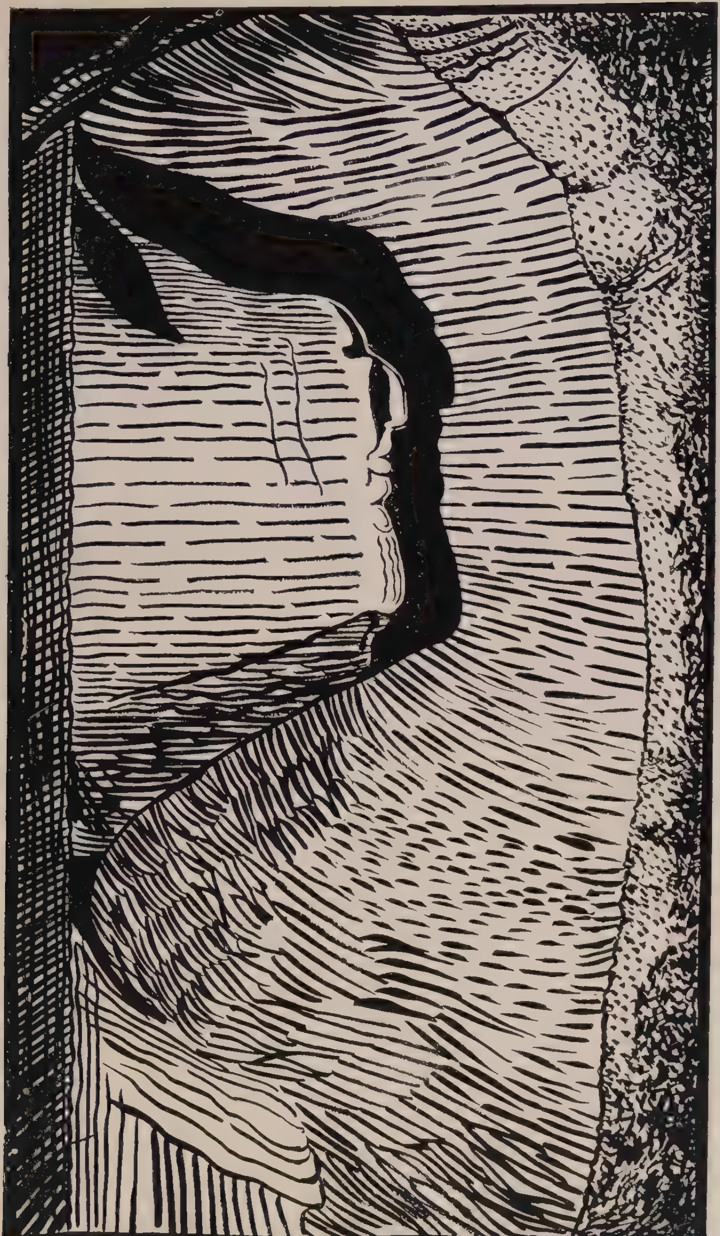
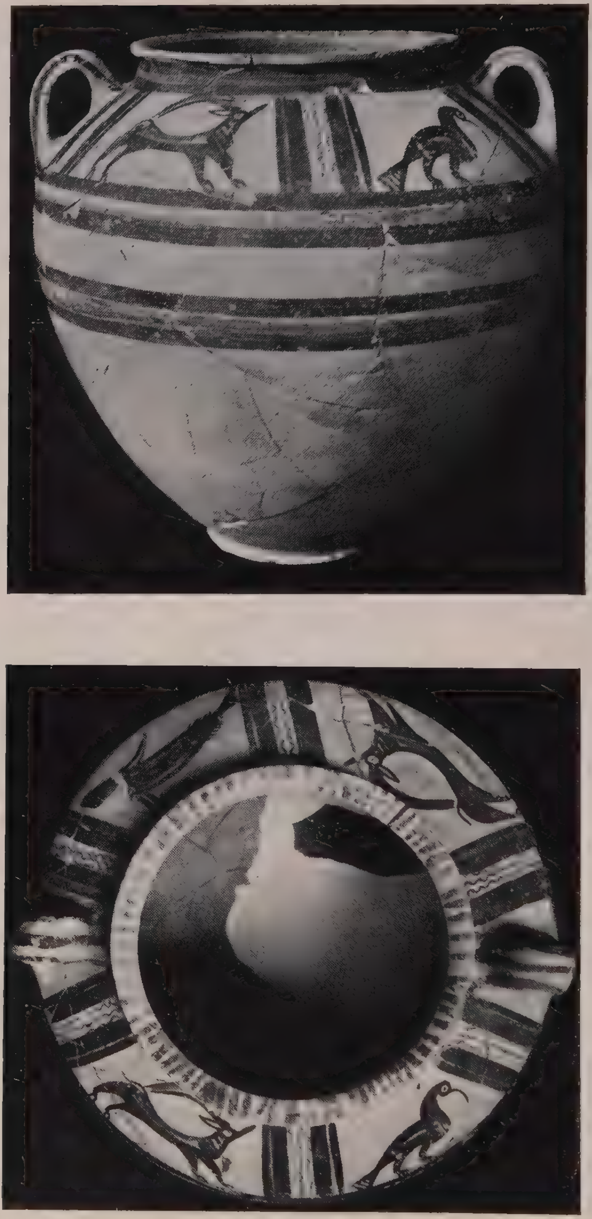
[1] W. F. Albright, *Journal of the Palestine Oriental Society* (hereafter abbreviated to *JPOS*), IV (1924), 154. Alt, *JPOS*, XII (1932), 133; *Palästinajahrbuch*, XXX (1934), 19.

[2] Alt, *Palästinajahrbuch*, XXX (1934), 9.

[3] Musil, *op. cit.*, Heft 2, 25 ff. Woolley and Lawrence, *op. cit.*, 1st ed., 121 ff.; 2nd ed., 136 ff.



BOSS OF HARD LIMESTONE AT N.W. ANGLE OF GREAT SHAFT, 80 FEET BELOW SURFACE, ROUGHLY CARVED TO REPRESENT HUMAN HEAD. DRAWING BY OLGA TUFNELL



VASE DECORATED IN RED AND BLACK, RECONSTRUCTED FROM FRAGMENTS FOUND IN RUBBISH PITS ASSOCIATED WITH EARLIEST TEMPLE

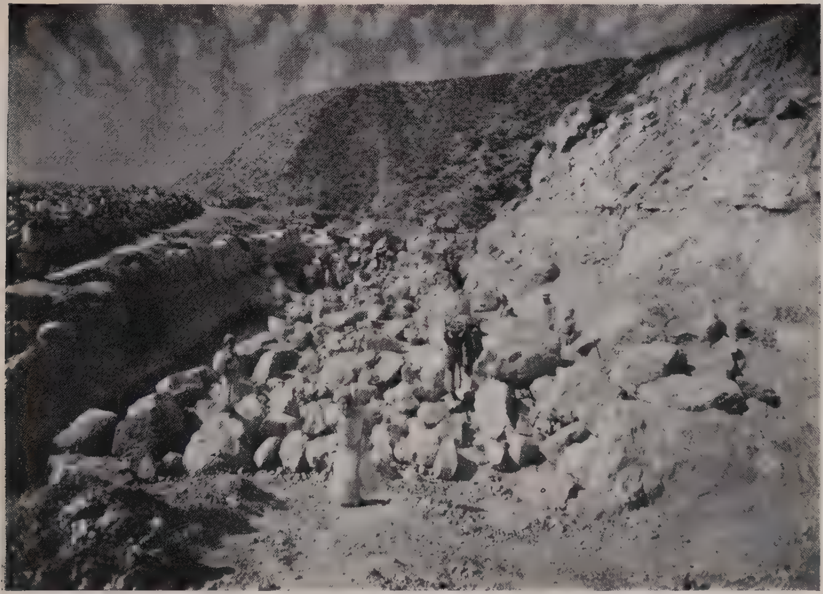


FIG. 1. LOOKING NORTH ALONG "HYKSOS" FOSSE, AFTER REMOVAL OF XVIIITH-XIXTH DYNASTY TEMPLE. LEFT: REMAINING WEST WALL, BUILT OVER COUNTERSCARP

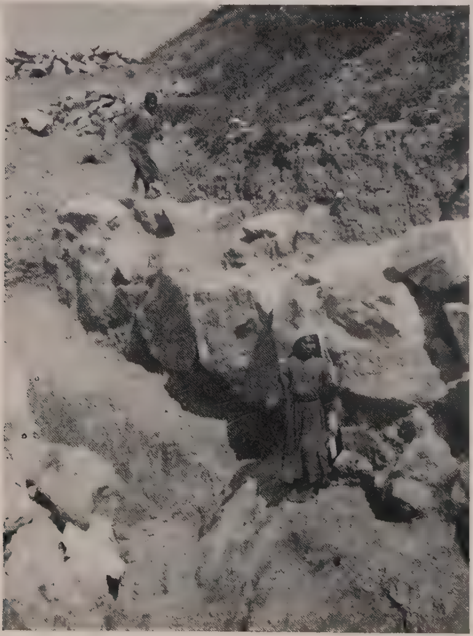


FIG. 2. SOUTH FACE OF CROSS WALL OVER FOSSE. NOTE LEDGE OF ROCK ON WHICH THE FOUNDATIONS STAND

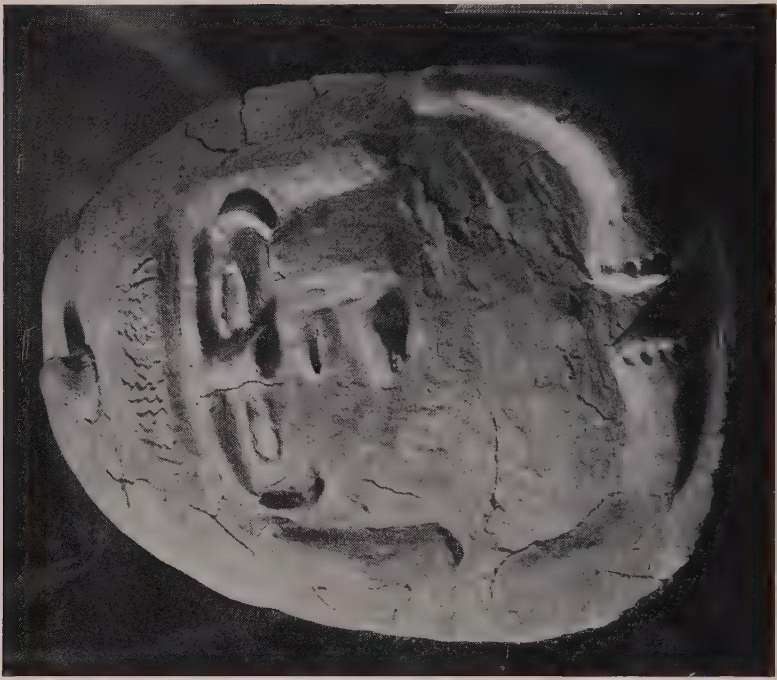


FIG. 1. POTTERY LID OF "SLIPPER" COFFIN FROM XIXTH DYNASTY TOMB

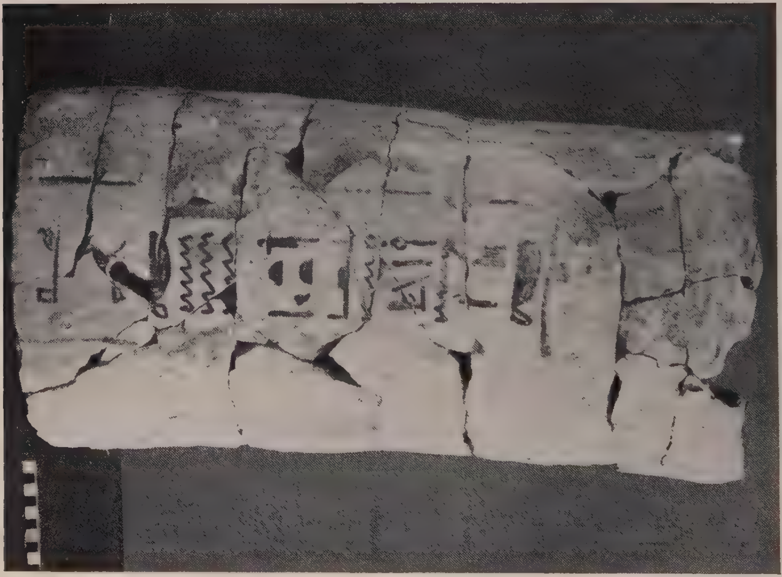


FIG. 2. INSCRIPTION IN CRUDE HIEROGLYPHS DOWN CENTRE OF POTTERY COFFIN

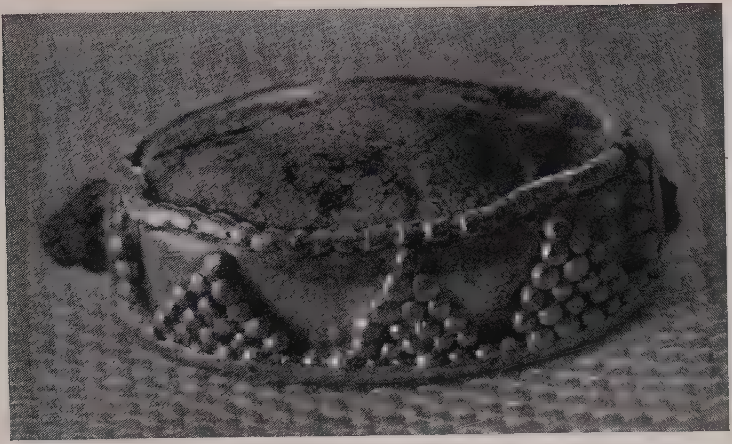


FIG. 1. SCARAB OF TORQUOISE MATRIX, SET IN GOLD BAND. SIZE $\frac{1}{2}$ X $\frac{3}{8}$TH INCH

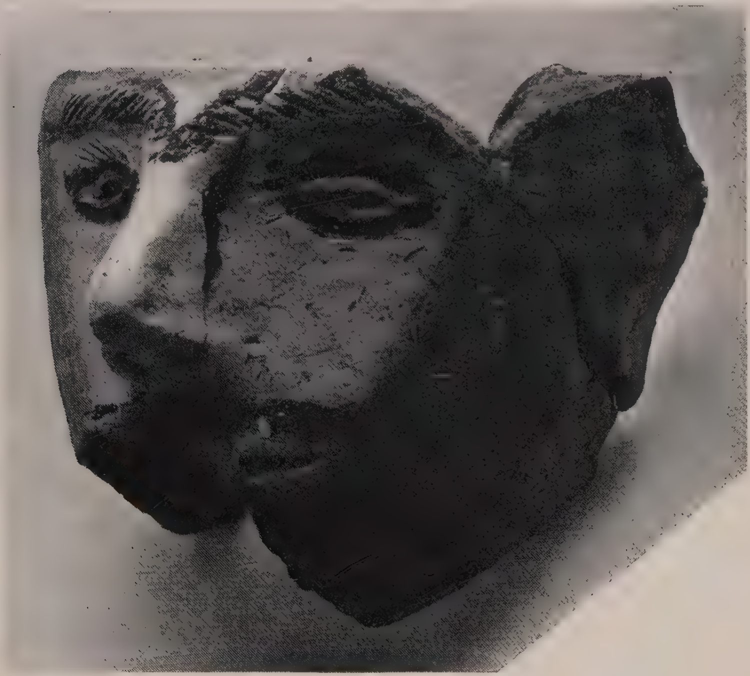


FIG. 2. PART OF ANTHROPOMORPHIC VASE, EYEBROWS AND EYELASHES ARE INCISED AND PAINTED BLACK

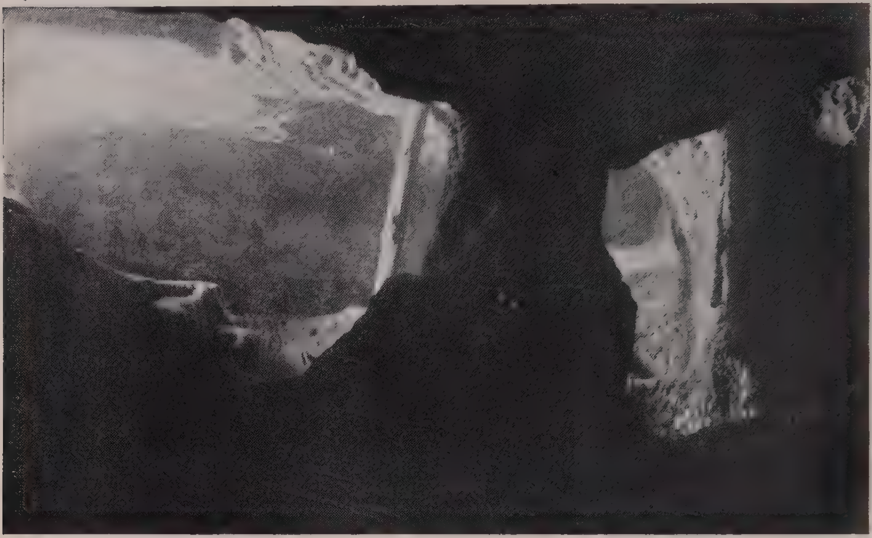


FIG. 1. INTERIOR OF CAVE, BELOW N.E. CORNER OF MOUND, USED AS DWELLING PLACE IN EARLY BRONZE AGE

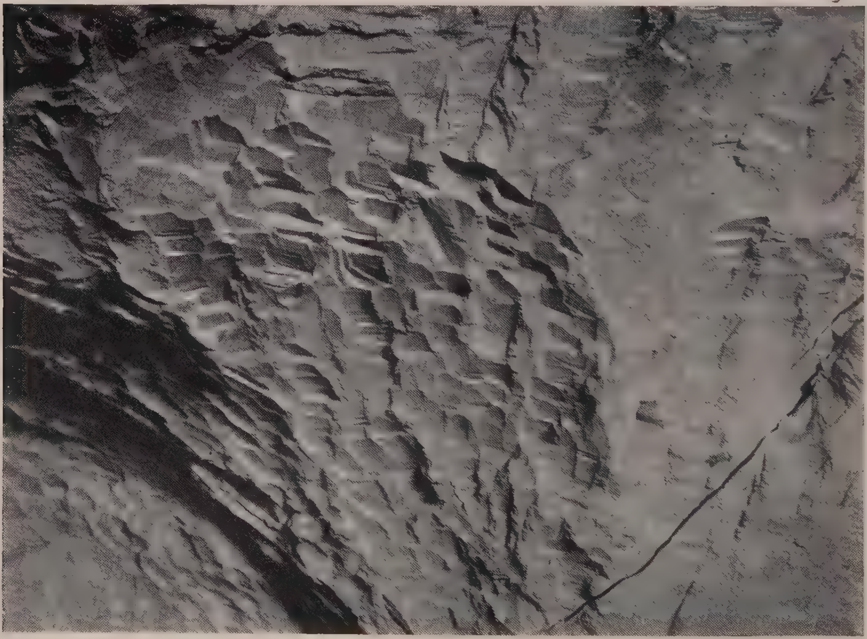


FIG. 2. MARKS OF STONE ADZES ON WALL AND ROOF OF CAVE, STILL FRESH AND UNAFFECTED BY SMOKE

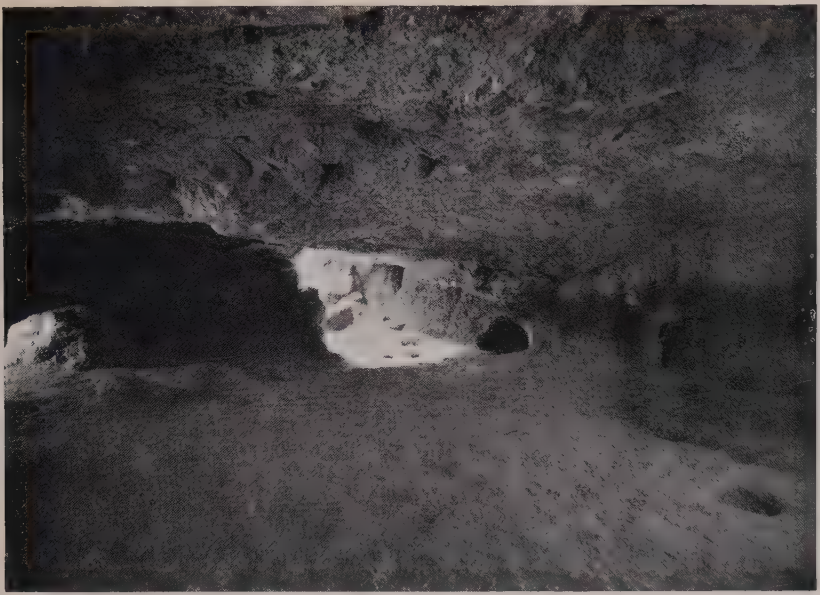


FIG. 1. LARGE CAVE NEAR N.E. CORNER OF MOUND, USED AS POTTER'S WORKSHOP IN LATE BRONZE AGE. NOTE STONE SEAT SET IN WALL NEAR ENTRANCE

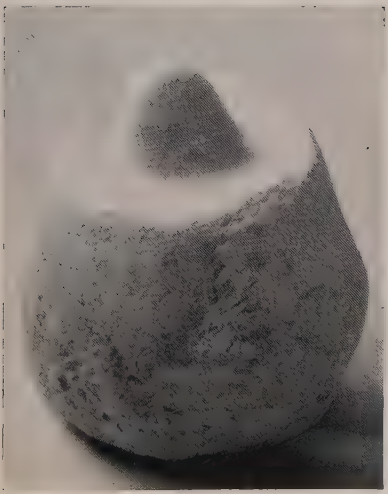


FIG. 2. LIMESTONE PIVOT, POSSIBLY THE BEARING FOR A WOODEN OR CLAY TURNTABLE

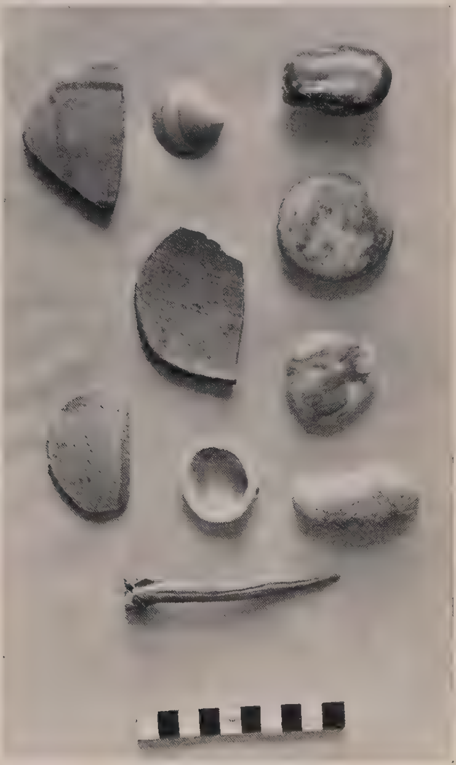


FIG. 3. SHERDS GROUND BY USE IN SMOOTHING VESSELS ON THE WHEEL, PEBBLES AND SHELLS FOR BURNISHING, AND A BONE POINT

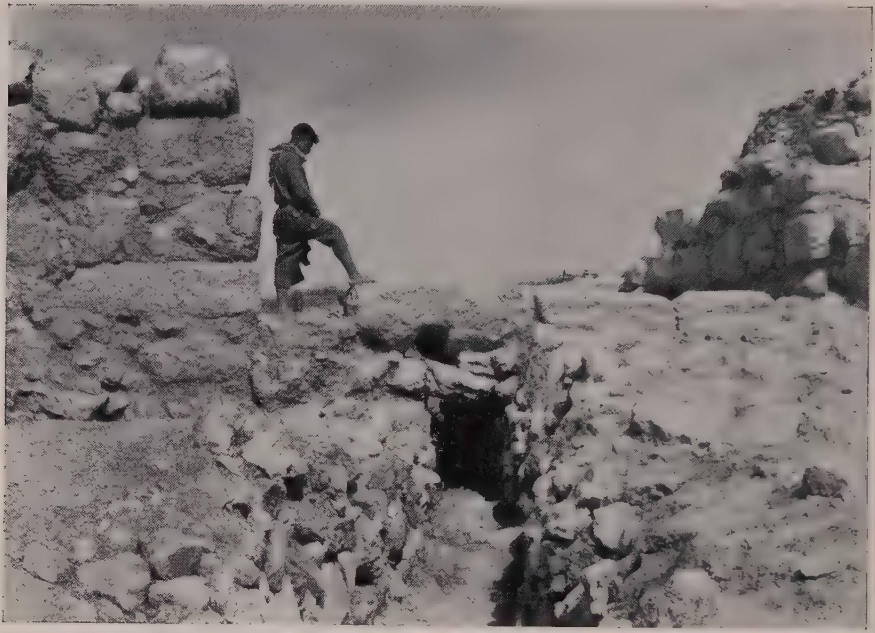


FIG. 1. INNER GATEWAY (588 B.C.) FROM OUTSIDE. COBBLED ROADWAY CUT BY DRAIN FROM CITY

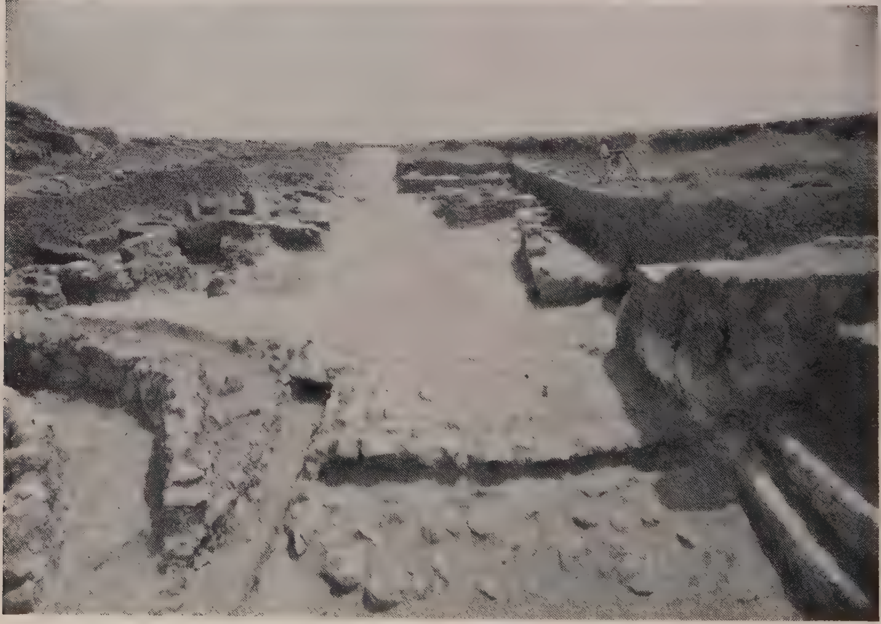


FIG. 2. ROADWAY INSIDE CITY, FLANKED BY SHOPS AND HOUSES

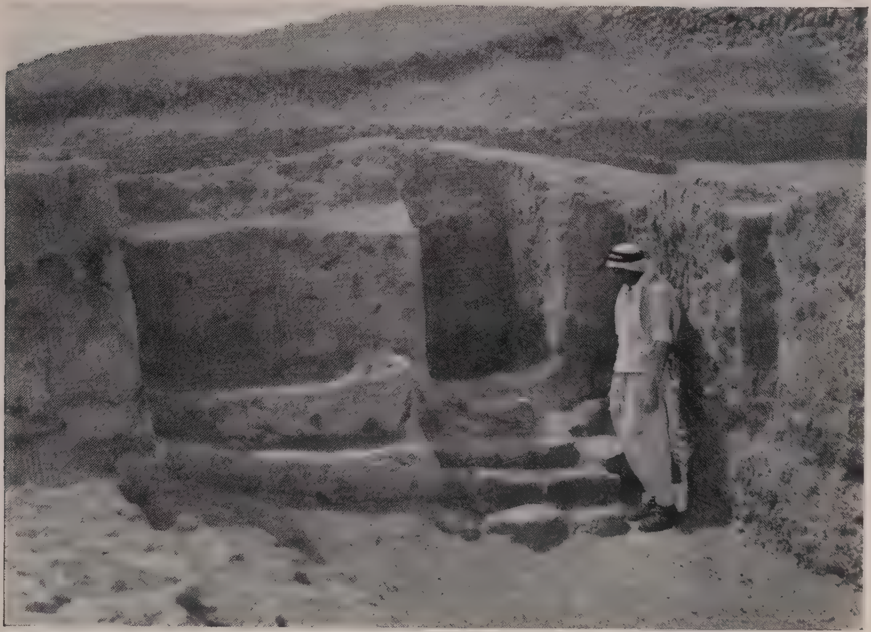


FIG. 1. INNER GATEWAY (597 B.C.) LOOKING S.W., SHOWING COBBLED THRESHOLD, BRICK PIERS AND DOOR TO UPPER FLOOR. DEBRIS BEHIND MAN IS FALLEN BRICKWORK FROM TOWERS AND ITS SURFACE IS 588 B.C. ROAD LEVEL

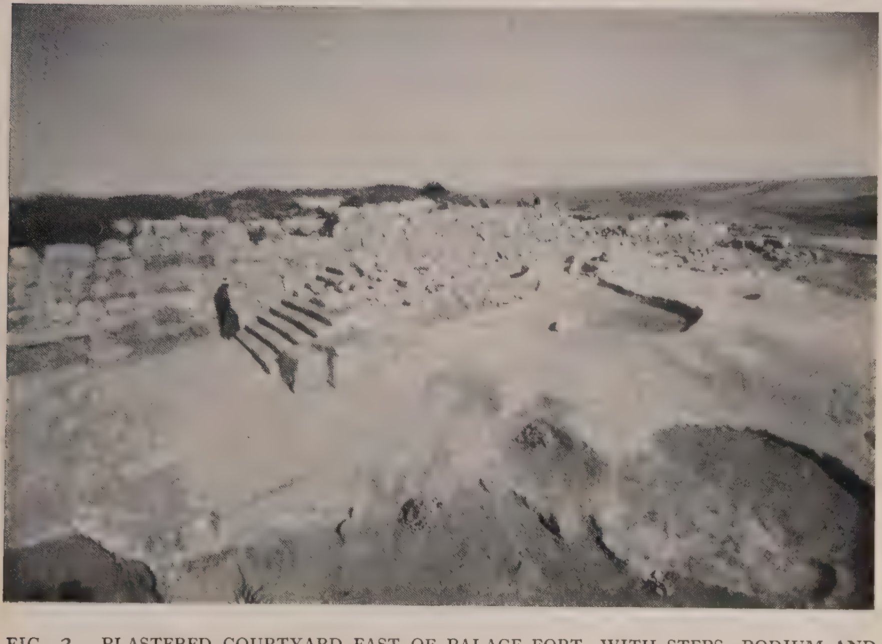


FIG. 2. PLASTERED COURTYARD EAST OF PALACE-FORT, WITH STEPS, PODIUM AND DRUM OF LIMESTONE

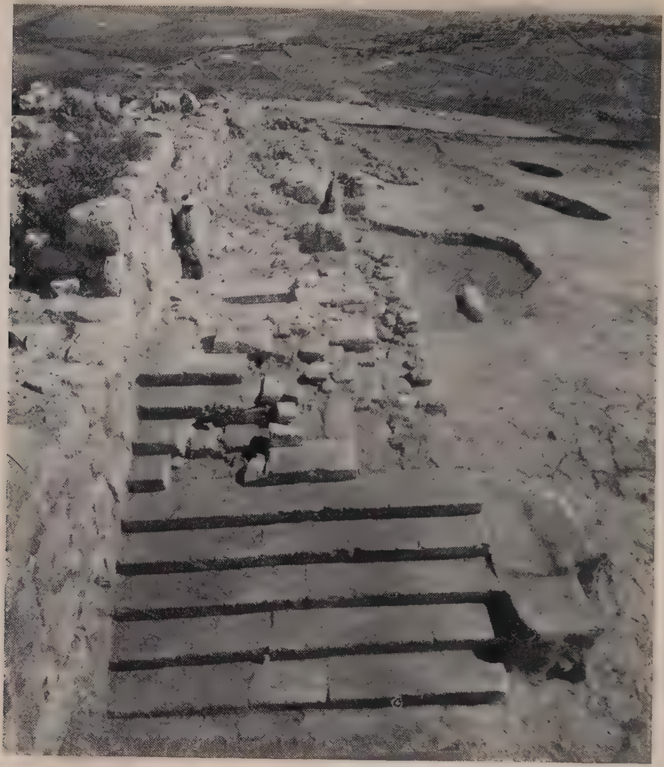


FIG. 1. PALACE STEPS, LOOKING NORTH, IN USE TILL 597 B.C. BOY STANDS ON TOP STEP OF EARLIER FLIGHT, ON WHICH SCRIBBLINGS WERE FOUND

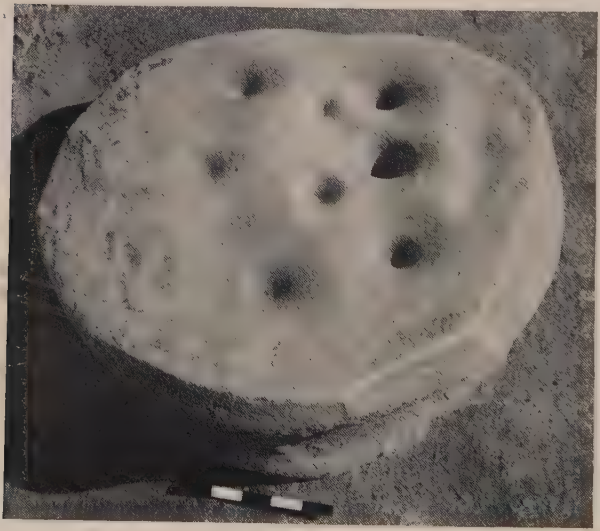


FIG. 2. DRUM OF LIMESTONE, WITH EIGHT SMALL DEPRESSIONS PITTED BY USE. IN POSITION AT FOOT OF PALACE STEPS

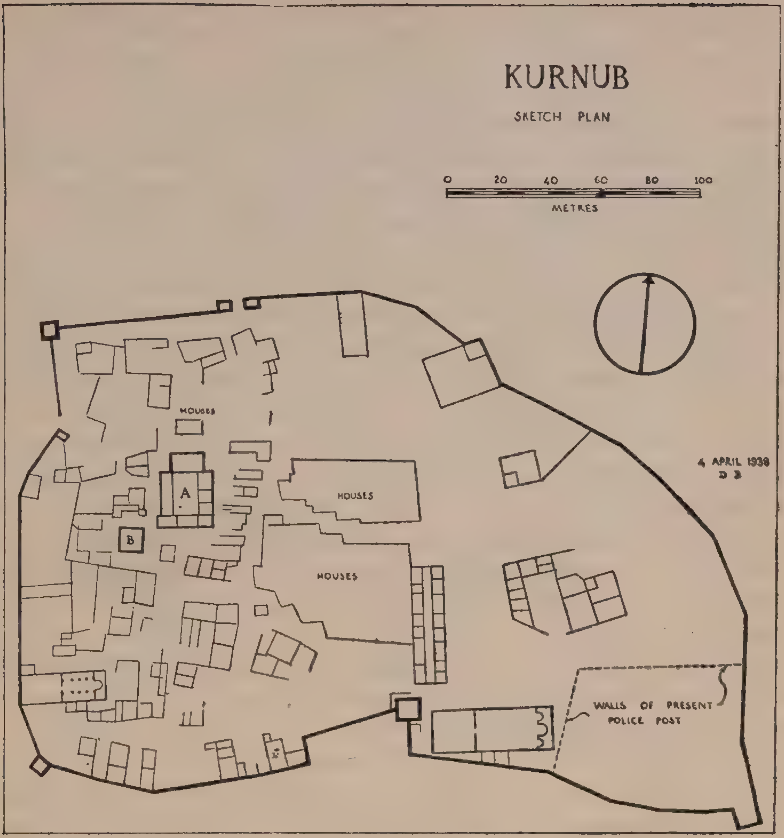

KURNUB
SKETCH PLAN
0 20 40 60 80 100
METRES
HOUSES
HOUSES
HOUSES
A
B
4 APRIL 1938
D B
WALLS OF PRESENT POLICE POST

FIG. 2

completely stripped of its well-dressed facing stones. The rest of the town has been spared. There are two large buildings just outside the North Gate below the town. Only one course can be seen above ground, but all this lower ground to the north is buried in sand brought by the west wind from the sandhills that divide the Kurnub plain from Wadi es Sirr, and excavation might reveal much.

The identification of Kurnub with the Roman town of Mampsis is now generally accepted, and the older identification with Thamara has been given up.[1] Glueck noted much "Nabataean" pottery of all kinds on the site,[2] and I found a cemetery in the plain 1 km. north-east of the town with black glazed and "Nabataean" sherds and Terra Sigillata. But my impression of the surface pottery in and about the town, which I have collected on three separate visits, is that pseudo-sigillata wares are most common. These are to be compared with the pottery from most of the sections of dumps cut at Khalasa by the Colt Expedition in 1938, which is provisionally dated by Baly to the fourth century A.D. Buildings A and B on the plan are remarkable for their chiselled or drafted masonry with neat joints. (Plate XVIII, Fig. 1.) A cistern immediately west of Building B[3] has a barrel-vaulted roof of well-cut stones, most of them drafted blocks resembling those of Building A. These features have no parallel in the Byzantine (sixth–seventh centuries A.D.) buildings of Sbaita and Auja Hafīr, and though our knowledge of the development of architecture and masonry styles in this region is still elementary, it is perhaps not too hazardous, in view of the rarity of specifically Byzantine wares in the surface pottery of the town, to suggest a Roman, rather than a Byzantine date for this group of buildings. Woolley has already suggested that part of the "Serai," north of the East Church, was earlier than the rest. It begins to look as if the two churches were comparatively late features in the plan of the town.

Woolley has noted the comparative richness of decoration of the small West Church, whose stone carving is perhaps better than that of any other site in the district. We found that all six decorated capitals now visible on the surface are half-capitals only, engaged to rectangular blocks of masonry. Most of the column drums on the surface, however, belong to free-standing columns. Two of the six capitals have a vertical cut 0.07 metres (2¾ inches) wide and 0.09 metres (3½ inches) deep down the middle of their decorated face. The restoration of the church therefore presents problems which only a clearance can solve.

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[1] R. Hartmann, *ZDPV*, XXXVI (1913), 110 f.; Albright, JPOS, IV (1924), 153 n. 1. Woolley and Lawrence, *The Wilderness of Zin*, 2nd ed. 136, and George Adam Smith, *Historical Atlas of the Holy Land*, 2nd ed., (1936), pl. 50 therefore need correction.

[2] *Annual*, XV, 114.

[3] Musil, *op. cit.*, Heft 2, 27.

Attempts have been made to take Kurnub further back into history than the Nabataeans, and to identify it with Mamshat of the Hebrew stamped jar-handles and even with a town mentioned in the Tell el Amarna letters ; Alt has more recently admitted that there is no archaeological evidence to support these hypotheses.[1] There are, however, some slight signs of earlier occupation, though naturally not on the town site, where the Roman town has buried anything earlier. On the hillside south-west of the town across the wadi Guy found "a site at least 80 paces across, with flint artifacts, three early sherds (? chalcolithic, before 3000 B.C.), and perhaps a hut-circle about 3 metres in diameter," and not far from it I found an area about 25 × 10 metres which produced a quantity of sherds that are coarser than the wares familiar on Roman-Byzantine sites.

The water-supply of modern Kurnub is small. There is a well in the gorge south-east of the town and a waterhole a little below it, but these can do no more than supply the police and one or two Bedouin families that are usually to be found here. To provide for the needs of the town the remarkable system of dams was built across the wadi south-west of the town. Woolley has described them and given a photograph of the Great Dam, the lowest of the series, which has a batter wall 26 metres long and 8.3 metres high, and is 7 metres thick. His description can be amplified. There are at least six dams in this part of the wadi, besides smaller, though equally elaborate dams and spillways and retaining walls in the side wadis. Woolley held that the main purpose of the dams was to conserve the soil which would otherwise be washed away by every torrent, and for him the upper dams, buried to their tops in silt, are proof of the effectiveness of the scheme. Guy, however, believes that the upper dams, including those in the side wadis, were used to trap the silt, which was dug out and dumped when necessary, and he has drawn our attention to a large silt-heap at the south side of the third dam.[2] The flood-water, thus cleared of most of its silt, was stored in the basins

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[1] Albright, *JPOS*, V (1925), 44 f. n. 70. Alt, *JPOS*, XII (1932), 1933 ; *Palästinajahrbuch*, XXX (1934), 20 n. 2.

[2] Counting upstream from the Great Dam as in Woolley's text, not downstream as in his plan.

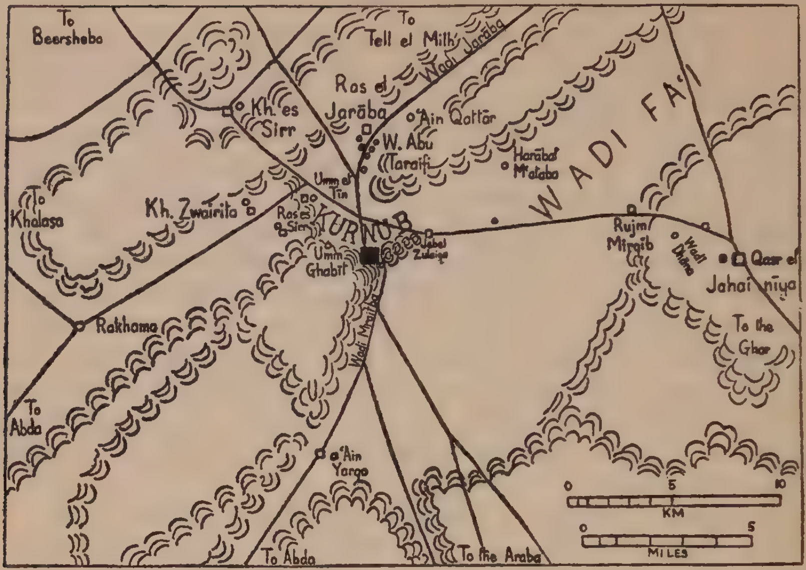
To Beersheba
To Tell el Milh
Wadi Jaraba
Ras el Jarāba
Kh. es Sirr
'Ain Qottār
W. Abu Taraifi
Harābat M'ataba
WADI FA'I
Umm et Tin
To Khalasa
Kh. Zwairita
Ras es Sirr
KURNUB
Jabal Zuleiqa
Umm Ghabit
Rujm Mirqib
Wadi Dhaba
Qasr el Jahainiya
To the Ghor
Rakhama
Wadi Mmailha
To Abda
'Ain Yarqa
To Abda
To the Araba
0 5 10
KM
0 5
MILES

FIG. 3. SKETCH-MAP TO ILLUSTRATE THE POSITION OF KURNUB, THE MEETING-PLACE OF IMPORTANT CAMEL-TRACKS

between the Great Dam and the second dam and the second and third dams, which could contain two million gallons (10,000 cubic metres) or more of water.

Defended by a number of small blockhouses outside the town on all sides except the south, which overlooked the sheer sides of the gorge, Kurnub commanded the descent to the gorge and was the knot where roads from all directions must meet (Fig. 3). The appearance of the town, with the blockhouses as its outer line of defence, its large buildings evidently of a public nature which take up so large a part of its area, and its great water system, suggests that it was planned by an authority and did not develop in the haphazard way in which Sbaita, like most modern Palestinian villages, grew. But this does not imply that Kurnub could not justify its existence economically. The country to north and west is well watered and fertile. To the north at the head of Wadi Abu Taraifi are seven or more rock-cut cisterns and the middle course of that wadi is cultivated to-day.[1] West of Kurnub there is some

[1] On Ras el Jarāba, the watershed between Wadi Abu Taraifi and Wadi Jarāba, there is a building 24 × 15 metres with smaller outlying buildings. The pottery is abundant, and consists largely of coarse sherds that seem to be pre-Roman.

cultivation in the wadi at present, and when we cross the watershed to Wadi es Sirr we come to an open fertile plain with broad tracts of cultivated land. On this side there are four cisterns and wells within one and a half hours of Kurnub, and small sites by three of these. Descending into the gorge south of Kurnub we come out into the open plain of Wadi Mraitba, and two km. from Kurnub we find a system of field-walls which extend for a further two km. The plain north of Kurnub may have been cultivated in antiquity more than it is to-day, since we have seen above that it is now covered in recent sand. In the wet spring of 1938 this sandy plain was fair with wild flowers.

A Greek inscription was found on a stone built into the back wall of the police-station, and is published in a separate paper (p.236). On the roof of the police-station we were shown an interesting gravestone which for greater safety we removed to the Palestine Museum at Jerusalem (Fig. 4). In shape it resembles a conventionalized human figure with head and body, a type quite common in the Southern Desert. The earliest are pre-Christian, though the type persists into the Christian period.[1] But whereas all the known stones of this type have Greek inscriptions, this evidently has letters of a Semitic alphabet running vertically down the body. It has not yet been read.

The ancient sources tell us that one day's journey from Mampsis (Kurnub) were the fort and village of Thamara on the road connecting Jerusalem and Hebron with Aqaba (Aila) and Moab. Alt has identified the fort of Thamara with QASR EL JAHAINIYA EL QIBLI, a Roman fort forty-five metres square discovered by Frank in a remote part of the mountains south-west of the Dead Sea.[2] Frank found in places clear signs of a Roman road which climbed up from the Ghor by the steep pass Naqb el Jahainīya to the fort and went on northwards by way of Wadi Fa'i and Wadi Jarāba to Tell el Milh (Malatha). The fort, built on the usual plan with a central court surrounded on all four sides by rooms, is well preserved, and Frank was able to make a very satisfactory plan. On the rubbish-heap of the

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[1] Alt, *JPOS*, VIII (1928), 195 f.; *ZDPV*, XLVI (1923), 58 f.

[2] *ZDPV*, LVII (1934), 257 ff.; 279 f.; LVIII (1935), 16, 33 ff.

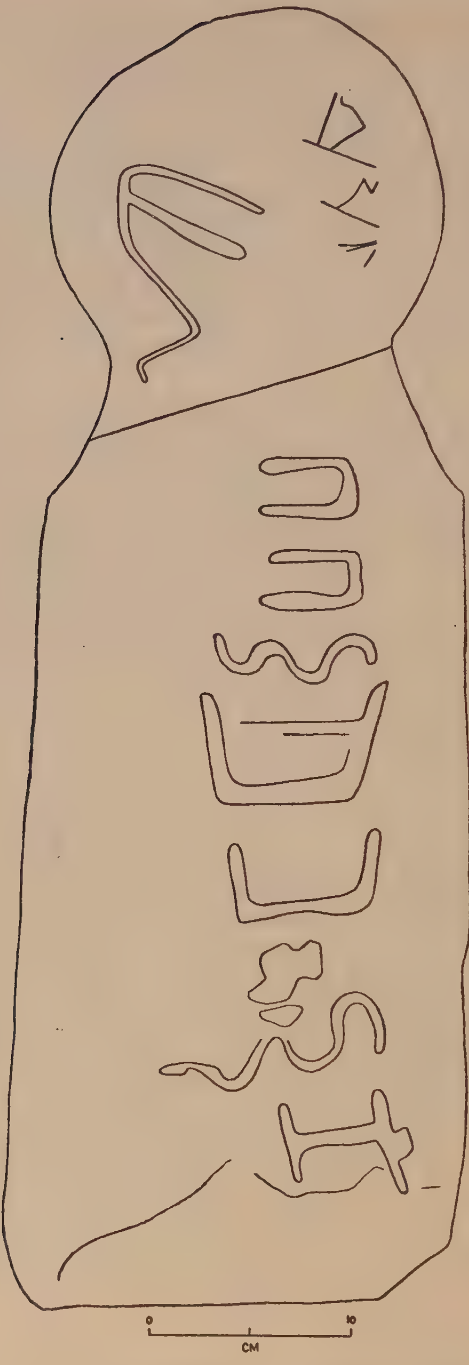

FIG. 4. LIMESTONE GRAVESTONE FROM KURNUB

fort I found large quantities of Terra Sigillata and pseudo-sigillata and two painted " Nabataean " sherds ; glass was also common. There was nothing specifically Byzantine.

It has been argued that the village of Thamara, the Old Testament Thamar, must lie further south in the Ghor, though no satisfactory site has yet been found for it.[1] Alt finds no difficulty in accepting this, and separates the village from the fort, since the fort had to be placed in a strategic position on the road however inhospitable the surroundings, whereas the village needed food and water. However, I feel that Frank and Alt make too much of their case when they speak of the country round Qasr el Jahainīya being waterless and uncultivable. It is important that Frank was there at a time when there had been no rain for a whole year, while my visit was at the end of a very wet winter and spring. The water-supply was very well provided for by the builders, for there was a reservoir 10 metres square in the central court, a second 14 × 6 metres against the west wall of the fort, and a third 12 × 6 metres 300 metres away to the south. They are so silted up that their depth cannot be ascertained ; all are well built and cemented. Should these fail, an emergency supply was provided in the upper reaches of Wadi Dhāna, one and a quarter hours to the north-west, where a dam 20 × 25 metres long, 1.5 metres thick, and 3 metres high was built across the wadi, whose banks above the dam were reinforced with masonry. Frank estimates that the reservoir thus formed could hold 6,000 cubic metres (one and a half million gallons) of water.[2] This was far more than the population of the small site that stands just above the reservoir could need, and obviously they were stationed there for the policing and upkeep of the reservoir. A road between Qasr el Jahainīya and the reservoir forks left from the road to Tell el Milh one km. above the fort. On a hillside about one hour north of the fort, just before it descends to the reservoir, it is as broad and clearly marked as many a motor road in Palestine.

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[1] Alt, *loc. cit.* Albright, *JPOS*, IV (1924), 153 n. 1.

[2] As far as I know, no fort of similar size has so elaborate a water-system. About 430 A.D. according to Notitia Dignitatum a cohort, an infantry troop of not more than 500 men, was posted at the fort of Thamara. Yet, if we accept Frank's figure for the capacity of the dam, and allow that two-thirds of the water would be lost by evaporation and seeping, there was still enough for a full army ration for 500 men for *two years*, to say nothing of the three smaller reservoirs nearer to the fort.

There are no ruins of houses about the fort, though above on a hill to the west there is a small building, evidently a look-out, and there are cairns on a hill to the east. But Frank and Alt have not given sufficient consideration to the hundreds of simple graves that extend along the valley north and south of the fort and up a side valley to the north-west. They are so numerous as to suggest that if the site was not permanently settled, it was at least regularly occupied by tent-dwellers who came to trade with the garrison, to live under their protection in unsettled times, or to draw on their water-supply in drought. The possibility of cultivation is not entirely excluded, for in May, 1938, after a winter and spring of exceptional rain, in going north-west from the fort by the track to Tell el Milh I found that the valley as far as its head, one hour's journey from the fort, was quite thick with wild barley, and our camels ate greedily of the shrubs that made the wadi and its tributaries pleasantly green. Admittedly I saw no terrace-walls, the usual sign of ancient cultivation in these parts, for these seem to come to an end a few kilometres east of Kurnub. But we should do wrong to imagine an abrupt boundary between the area where agriculture was carried on and that given over to pasture. Instead we must recognize the existence of a considerable area where grain is hopefully sown though the crops completely fail in bad years, which happen as often as one in three. The Arab is forced to depend on his flocks and herds and cannot completely give up a nomadic life, though in good years he need not wander in search of pasture but can temporarily settle.[1] To-day the zone of doubtful harvests has marched northwards, and these conditions prevail nearly as far north as Hebron, but in the Roman period, when the north-west of the Southern District was the seat of an urban civilization, they must have been restricted to the remoter east and south, districts where agriculture is now completely unknown. My view is therefore that the newly founded fort Qasr el Jahainīya, which probably took its name Thamara from Thamar the nearest place with a name, attracted round it people who established a semi-permanent settlement worthy of the name of village. We can see this happening to-day round the police-posts at Auja Hafīr, Aslūj, and Kurnub, and, as we have seen, it finds some support in the archaeological and topographical evidence. Such a settlement would naturally take its name from the fort, and I believe that this may have been the village to which Eusebius refers.[1] Until archaeological evidence in its favour is found, it is possible that old Thamar in the Ghor had ceased to be inhabited and become merely a place-name centuries before.

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[1] Cf. Ellsworth Huntington, *Palestine and its Transformation* (1911), 130–133.

Frank went no further north-west from Qasr el Jahainīya than Wadi Dhāna. The Deutsche Evangelische Institut went from Kurnub to the Qasr by car with some difficulty, and Alt came to the conclusion that there was no Roman road between the two sites.[2] I made the journey in six hours, travelling by camel with a good guide, the only way of studying a district whose best map is on a small scale and shows only the largest and most obvious archaeological features. I was thus able to establish three unrecorded sites between Qasr el Jahainīya and Kurnub :

(1) Forty minutes from the fort, before branching off to Wadi Dhāna, there is a building 3 metres square on the east side of the road at the head of a slight ascent. The pottery consisted of thin but rather coarse red sherds which probably stand in some relation to " Nabataean " ware.

(2) Two hours from the fort the track passes immediately south of the flinty hill El Mirqib and is commanded by the building Rujm Mirqib, which is 6 metres high and perhaps 11 metres long, and was divided into two rooms. It probably stood to a considerable height. The walls are a metre thick and had good faces inside and out. A large quantity of pseudo-sigillata sherds was found on the east and south slopes of the hill, and to the south of the track below the hill I found two unpainted " Nabataean " sherds by a group of graves.[3]

[1] His words show that he had no information that the fort of Thamara was separated from the village : λέγεται δέ τις Θαμαρὰ κώμη διεστῶσα Μάψις ἡμέρας ὅδον ἀπίοντωι ἀπὸ χεβρῶν εἰς᾽Αϊλάμ, ἥτις νῦν φρούριόν ἐστι τῶν στρατιωτῶν. " There is said to be a village of Thamara, one day's journey from Mampsis on the road from Hebron to Aila, which is now a fort with a garrison " (Onomasticon, 8, 8 Klostermann).

[2] *Palästinajahrbuch*, XXX (1934), 20 ff.

[3] A horseshoe-shaped hill 1 km. further south is covered with over a hundred large circular cairns. I could find nothing to date them.

(3) From here onwards the track crosses gently rolling sandy slopes to the broad Wadi Fa'i and follows this upwards to the watershed and the Kurnub plain. In such country, where the going is so easy that a car was driven over it, it is useless to look for the artificial cuttings and levellings that over more difficult ground indicate a Roman road. However, one and a quarter hours before reaching Kurnub the track passes between Jebel Zulaiqa, the eastern end of the rocky spur that runs out north-east from Kurnub into the plain of Wadi Fa'i, and a low isolated hill, and here at the roadside is a rectangular enclosure 15 × 9 metres. Its walls are built of large undressed blocks as much as 0.85 metres wide. Only one course was visible above ground, and there were few stones lying about, so that the building may not have had a roof. Such rectangular structures, now lying practically flush with the ground, are common in the district, and my guide, an Arab of the Tiyāha tribe, described them to me as ḥawaṭīyāt, walled enclosures. Such a building would do very well as temporary quarters for a police patrol which could stable its camels and camp inside and "show the flag" to potentially unruly Bedouin; and this, I imagine, was its purpose. I found two sherds only, one a thick Roman-Byzantine ribbed sherd.

Thus the only points of strategic importance between Kurnub and Qasr el Jahainīya are commanded by buildings whose pottery is in the main of Roman date. There can be no doubt that there was a Roman road along this direct route between the two sites. The troops at Rujm Mirqib could get their water from Wadi Dhāna. The patrol visiting Jebel Zulaiqa would take water with it. In case of need there was water at Harābat M'ataba on the north side of Wadi Fa'i, one hour to the east, and the map marks an ancient well in Wadi Fa'i 3 km. distant, which I have not visited.

Wadi Jarāba, north-east of Kurnub, does not seem to have been an important thoroughfare, but it is crossed by the road from Tell el Milh to Qasr el Jahainīya at a point where there are convenient passes in the ranges of hills north and south of it. When travellers on this road reached Wadi Fa'i they could get water from Bīr Fa'i and Harābat Ibn Batāh. The former is now completely filled with windblown sand, and the latter is partly filled with silt and its runnel[1] is in such bad repair that it rarely has any water. It could easily be repaired ; there is no water within two hours of it. In Wadi Jarāba there are no cultivation-terraces except at the extreme head of the wadi, where, as we have seen, there is a site on Ras el Jarāba. But wild barley grows in many parts of the wadi, and there are numerous caves, cairns, and graves. Roman-Byzantine sherds were found by a cairn close to ‘Ain Qattār and at a rough enclosure further north-east. There is a cistern and a well, both in use, in Wadi Baidha with an enclosure beside them, and in the hills between Wadi Jarāba and Wadi Fa‘i there are two cisterns, Harābat Umm Tala‘ and Harābat Umm esh Shīd, which I have not visited. Harābat Ibn Ayān and another cistern close by it are silted up and dry, but further to the north-east there is an excellent cistern Harābat Abu Rukaiba, and in the country north of this are several cisterns which I have not visited. One km. east of Wadi Abu Rukaiba is a cave on the north side of Wadi Jarāba, on whose walls I found two Greek graffiti, which are published in a separate paper (pp. 237–8), and scratched drawings of animals and birds.

From Kurnub to ‘Ain Hosb in the Araba.

This important route, which is taken by the motor road, crosses the open plain south-east of Kurnub below the gorge and then climbs without difficulty to the head of the mountain-range which extends from north-east to south-west and divides the basin of Wadi Fa'i from Wadi Fiqra. Though the approach from the west is easy, the eastern scarp above Wadi Fiqra is a " formidable barrier, a naked limestone ridge, not less than a thousand feet high, and very steep." It can be crossed by a few passes only, the most important of which are commanded by small buildings :

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[1] The runnel which leads the water of a wadi to a cistern may be more than 200 metres long. They are generally cut in the soft ground and when well preserved are bordered by low stone walls to make them more permanent. Often the part of a runnel nearest the cistern is cut in the solid rock like the cistern itself. A low dam wall across the wadi below the cistern prevents the escape of the water until the cistern has received its fill. When the walls of the runnel are in poor repair the cistern gets little water, for light rains soak easily into the porous soil. The load of silt carried down by heavier rains needs to be cleared from the cistern frequently, and each cistern has its conspicuous silt-heap. But in the remoter wadis this work is no one's special responsibility, and has often been neglected by the small nomad population, which for the last 1,200 years has had no help or encouragement from the successive rulers of Palestine. "In dry countries . . . there is no need of actual injury to cause soil to become poorer, forests to disappear, and nomadic life to gain ground. It is enough to do nothing, not to keep watercourses in repair, not to look after the trees." (A. Bernard and Lacroix, *L'Evolution du Nomadisme en Algérie* (1906), 29.)

(1) Naqb Sfai,[1] used by the motor road. At the beginning of the ascent from the western plain is a narrow hill of no great height south of the road, whose top is crowned by a number of unconnected buildings called Rujūm Sfai. Three are rectangular with an average size of 20 × 7 metres, and seven are square with sides of 3 to 6 metres. There are also a number of round cairns. Glueck found no pottery here,[2] but after a long search I found a quantity of sherds by the side of one building only. They were of a rough ware that does not appear on Roman-Byzantine sites. Dr. C. S. Fisher thinks that two plain rims may belong to the Middle Iron Age (900–600 B.C.). Baly has drawn my attention to the header-and-stretcher construction at the corners of the best preserved building on the site, which does not suggest Roman-Byzantine construction. (Pl. XVIII, Fig. 2.) It may stand in some relation to the megalithic header-and-stretcher construction of Iron Age buildings in Transjordan.[3] This interesting site deserves further investigation, which would not be impossible as it is conveniently situated on the motor road. On a hill immediately to the east is a building 3 metres square, and opposite on a hill north of the road is a building 25 × 7 metres which seems to have had a square tower at each corner. No pottery was found with either of these buildings. Further east near the foot of Naqb Sfai is a building of larger masonry than usual with which we found Roman-Byzantine pottery.

(2) Naqb Safā has been visited by Woolley and by Glueck. The latter found three buildings 7 to 9 metres square at three

[1] Naqaba is " to bore a hole." A naqb is a pass over a mountain, and especially the ascent of a precipice.

[2] *Annual*, XV, 115.

[3] Glueck, *Annual*, XIV, 54. *Bulletin*, No. 68 ; 14, 17, 19.

points on the steep descent. All had Byzantine pottery. At one two " Nabataean " sherds were found,[1] at another a Byzantine lamp.

(3) It remains to be seen whether there are any sites in the difficult passage of the gorge of Wadi Yemen, which no one seems to have visited since Seetzen in 1807. Edward Robinson says this route was more used than Naqb Safā on account of the water at the top.

There is water at ʻAin Fiqra near where the road crosses that wadi. Further east the road goes by convenient wadis through a limestone plateau in an advanced state of erosion. We have not followed it, but the map marks a site 5 km. east of Wadi Fiqra. The road reaches the Araba at ʻAin Hosb, an important road-junction. Buildings here were plundered to build a police-post which was later abandoned on account of malaria.[2] Glueck reports that the pottery is plentiful and mainly " Nabataean."

ED DARB ES SULĀTNI

Musil describes what was in his time an important route from Maʻan in Transjordan to Gaza by way of ʻAin el Waiba, Naqb Marzaba, Wadi Murra, Naqb el Ghārib, and Khalasa,[3] Woolley and Lawrence's guide called it Ed Darb es Sultāni, the King's Highway.[4] It was greatly used by the camel caravans till the beginning of this century, the whole journey taking five days, but the Hejaz Railway and the motor lorry between them have taken the trade from this route. We met no one on the days in March, 1938, that we passed from Wadi Murra to 'Ain el Waiba. The road is rather difficult on the steep pass of Naqb Marzaba, which our camels with only moderate loads needed some coaxing to descend, and Musil says that heavily loaded caravans took the longer road by way of 'Ain Hosb and Kurnub.

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[1] To suggest as Glueck does that " these may have come from some passing caravan," is to prejudge these sites as exclusively Byzantine. Yet Baly agrees that the common ribbed sherds cannot be dated with any certainty, and " Roman-Byzantine " is a better label for them than " Byzantine."

[2] Frank, *ZDPV*, LVII (1934), 254.

[3] *Op. cit.*, Heft 2, 204.

[4] Like its English equivalent the phrase is descriptive, not a proper name. However, in these remoter parts a Bedouin would probably know only one " King's Highway," and the phrase would be for him a proper name. In the same way, English country-people may speak of " *the* Roman Road." In the desert Ed Darb es Sultāni is still used of the motor roads. But now that there is no longer a sultan the phrase tends to give way to Darb (or Tarīq) el Hukūma, the Government Road, or Darb (Tarīq) et Trombīl ; the last word is a local corruption of automobīl.

Naqb el Ghārib, the " Western Pass," is not difficult, and a car has gone up and down it. At its top is a building, 18 × 15 metres, with Roman-Byzantine pottery, and the tracks through the hills between here and Asluj also have buildings on them. An easy track from Kurnub by way of Wadi Rākib joins the main track in Wadi Murra. At 'Ain Yarqa, where there is good water, the Kurnub track is commanded by a building 25 metres square in which the party-walls of several rooms can be seen. Here we found a lamp-fragment which Mr. J. H. Iliffe dates to the end of the fourth century A.D., and there was other Roman-Byzantine pottery. There are no ancient sites in Wadi Madara and Wadi Murra, though the striking isolated mountain Jebel Madara has been identified by some with the Biblical Mount Hor[1] (Pl. XVII, Fig. 1), and there are many cairns, the relics of early Arab tribal wars.[2] There is no water between Wadi Murra and the Araba except for the small spring 'Ain Qattār which is not accessible for camels. We saw many cairns and graves along this part of the route, but no other buildings until we reached the western edge of the Araba, where a building 8 metres square on a hilltop, the last spur of the mountain zone, commands the unattractive oasis of 'Ain Kharūf, 2 km. W.N.W. of 'Ain el Waiba. (Pl. XVII, Fig. 2.) A large amount of pottery was found on the slopes below this small site, including an illegible stamped Hellenistic jar-handle. Baly would date none of the sherds later than the second century A.D. It is notable that, in contrast to sites further south, no " Nabataean pottery," painted or unpainted, was found here. There is no sign of an extensive settlement at 'Ain el Waiba.[1] Frank found much Roman, and evidently " Nabataean " pottery here ; we saw very little of any sort, though we looked for it. The place is malarial, and both here and at 'Ain Kharūf the water is scanty and bad. The springs are little used now that the new well at Ghamr, two and a half hours journey away, gives a constant supply.

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[1] Cf. G. L. Robinson, *The Sarcophagus of an Ancient Civilization* (1930), 263 ff.

[2] According to Palmer, *op. cit.*, II, 415 f., the two largest cairns are called Rujūm Ahmadī after a legendary hero Ahmadī. A natural feature near Qusaima is called Mujarr Rumh Lahmadī, " the mark of Lahmad's spear," he being a Bedouin warrior-chief (A. Jaussen, *Revue Biblique*, N.S. III (1906), 453). The two names are so similar as to suggest that they are the same. On the cairns and similar monuments of the region, cf. Woolley and Lawrence, *op. cit.*, 1st ed., 20 f.; 2nd ed., 38 ff.

Our conclusion is that ancient governments were content to control the water-holes on this route and the ascent of Naqb el Ghārib, but did not establish a line of posts along it.

FROM ABDA TO THE ARABA

In contrast to the Darb es Sultāni this route is remarkable for the number of its sites. The imposing town of Abda has been well described.[2] It was of Nabataean origin and took its name from the Nabataean king and hero Obodas. In Nero's reign it seems to have struck Roman imperial coins, and it has recently been suggested that it was temporarily annexed to the province of Judaea.[3] South and south-west of Abda there is a large area of cultivated land about the heads of Wadi Abda and Wadi Hafīr, and here Woolley saw many isolated farmhouses which he regarded as Byzantine.[4] South-east of Abda there are ancient terrace-walls and modern cultivation in Wadi Umm Hamāta, two hours from Abda, but none beyond. There is a dry rock-cut cistern in Wadi Umm Hamāta, and near it is a building 5 × 3 metres, perhaps a small farmhouse. No " Nabataean " pottery was found here, in contrast to the series of buildings further south-east. There can be little doubt that

[1] There is an Arab tradition that Aaron was originally buried here, but was disturbed by camels scratching at his grave in search of water. He mercifully gave up his grave to them, and as he did so a spring of clear bright water gushed out. (T. Canaan, *ZDPV*, LI (1928), 97.)

[2] The Dominican Fathers of the Ecole Biblique, *Revue Biblique*, N.S. I (1904), 403 ff., II (1905), 235 ff. Woolley and Lawrence, *op. cit.*, 1st ed., 93 ff ; 2nd ed., 109 ff.

[3] Barclay V. Head, *Historia Nummorum*, 2nd ed., 812. A. H. M. Jones, *The Cities of the East Roman Provinces* (London, 1937), 294. The evidence however apparently rests on only one coin whose place-name is not absolutely certain ; cf. *British Museum Catalogue of Greek Coins*, *Arabia*, etc. (1922), xxxii.

[4] *Op. cit.*, 1st ed., 8 f. ; 2nd. ed., 27 f. Musil, *op. cit.*, Heft 2, 152.

it was from these extensive cornlands that Abda drew its food-supply.

The ancient accounts of an important Roman road from Abda to the Araba and Petra have been connected by Alt with Frank's discoveries in Wadi Rumān and Wadi es Sīq,[1] as has been mentioned above. Frank approached Wadi Rumān from the south, and has not gone from there to Abda. A clearly defined road runs along the plateau south-east from Abda for several miles. It has not yet been followed to its end, but probably leads to Naqb el Mhamla, where the plateau is broken by the broad valley of Wadi Rumān and the track has to make its way down a cliff 200 metres high (Pl. XVI, Fig. 1). There is an easier pass Naqb es Sahl further west, but Naqb el Mhamla is passable for moderately loaded camels. At its head is a building 7 metres square, and close by it at the head of a wadi a building of unusual construction that may be a cistern. (Pl. XVI, Fig. 2.) Two of its walls and the exterior of a third are built of regular courses of well bonded stones; the fourth is razed level with the ground. The inside of the wall on the side facing the wadi, however, is not built in horizontal courses in the usual way, but in sections of an average width of 0.45 metre divided by approximately vertical joints. The stones of alternate sections project from the wall face to a maximum of 0.5 metre, and give the impression of corbelling though it is impossible that they could have carried a roof. The projecting stones are more roughly cut than those in the sections that do not project. Two hours north-west of Naqb el Mhamla the track, which reaches Abda in five hours more, is commanded on either side by small buildings.

Frank has described five sites in Wadi Rumān and Wadi es Sīq. We revisited all of them and found two other minor sites, one of which is a building 3 metres square on a hilltop south of the track, two hours west of Qasr Wadi es Sīq and perhaps forty minutes east of Qasr Mahalla. Its purpose was to command the approach to a spring of good water one km. to the south-west. Of the sites along this route Qasr Mahalla and the fort at Moyet 'Awād are square forts of the Roman type with sides of about 40 metres ; the latter has a settlement about it since the site is well watered. Alt would identify the two forts " without hesitation " with Asoa and Asuada of the ancient sources. El Byair seems on Frank's evidence to have been a mining site, though Alt has a theory that a fort may have been built or intended here before Qasr el Mahalla was built.[1] Alt has been impressed by the plans of the small buildings Qasr el ʻAbd[2] and Qasr Wadi es Sīq, especially the former, which lack the thought-out planning of the larger Roman forts and seem to have been built for the need of the moment with later additions as required. He cites two other small buildings on the eastern continuation of the route between the Araba and Petra as having the same features, though the plans of all four buildings vary. He concludes that they cannot be Roman, and suggests they are medieval. There is a Crusader castle at Petra and there are indications that some of the towns in the open country to the west were temporarily reoccupied about this time, so that buildings on the main road between them would be possible.[3] This theory is based on inference from the plans and construction, since Alt had no pottery he could take into account, and I was therefore very careful to get representative sherds along the route. The evidence is very constant for all the sites from Moyet ʻAwād, near the entry of the route into the Araba, to Naqb el Mhamla and beyond to the small buildings two hours nearer Abda. On all these sites, except the small building above the spring which produced little of any sort, " Nabataean " sherds were strikingly common. Baly thinks that some sherds from el Byair may be Byzantine; but from the forts Qasr Mahalla and Moyet 'Awād and all the smaller sites he sees nothing later than the second century A.D.[1] *This applies equally to Qasr el 'Abd and Qasr Wadi es Sīq*. We found no medieval Arabic pottery there or anything else to suggest a medieval date. Thus whereas the pottery evidence is not against Alt's belief that the main forts on this route were organized after the annexation of the Nabataean kingdom in 106 A.D., we have found nothing in favour of his theory of a medieval occupation ; on the other hand, we have pottery contemporary with that of the other sites from the two suspect buildings. He seems to have made too much of their " un-Roman " plans. The large forts were evidently built to a common pattern, but these smaller buildings would more likely be planned, perhaps by native builders, for immediate purposes. As for the slit-windows (Schiessscharten) of Qasr Wadi Musa, to which Alt appeals in support of his medieval dating, there are slit-windows at Kurnub (Building B) and Abda in buildings that can hardly be later than Byzantine and are more likely Roman or Nabataean.[2]

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[1] A Sīq is a gorge, in this case some 200 feet deep and 4 miles in length. Visitors to Petra will remember the very narrow Sīq by which they approach Petra from el Ji and Ma'an, at whose end they are suddenly confronted with the famous Khazneh.

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[1] *ZDPV*, LVIII (1935), 56 n. 1. On the hills to the north and east of el Byair there is an extensive cemetery of elaborately built graves not unlike the cairns south of el Mirqib. They are not at present datable.

[2] This was perhaps Qalʻat Umm el Qusair which Palmer was shown from a distance " in the hills with a road beside it." (*Op. cit.*, II, 421.) The wadi which flows from here eastwards to the Araba is called Wadi Umm el Qusair. Palmer's guide evidently knew no special name for the building, and gave it the name of the wadi, which itself means " mother of the little fort." The authority for the name Qasr el ʻAbd, fort of the slave, is Frank, who was told of a legendary negro warrior who fought a battle here. ʻAbd, slave, is regularly used for " negro."

[3] *ZDPV*, LVIII (1935), 50. The route seems to be little used to-day, except by an occasional European going to Petra by camel. These wadis are the grazing-grounds of the Sarahīn, but Frank (December, 1933) and we (April, 1938) saw very few people in them.

We have not yet been south of Wadi Rumān. Frank's journey from Aqaba through this more remote region has revealed several sites, especially cemeteries, of Nabataean or Roman date, and it is clear that much exploration remains to be done there. There may be important thoroughfares like that of Wadi Rumān to be discovered. In the north of our region the good results obtained in the hills south-east of Beersheba demand work over a larger area, for Musil has mentioned sites here that have never been described. No one has considered as a whole the agricultural region round Khalasa and Ruhaiba, or that between Abda and Bīr Hafīr, or that near Sbaita in the Wadi el Abyad. Good air-photographs of these,

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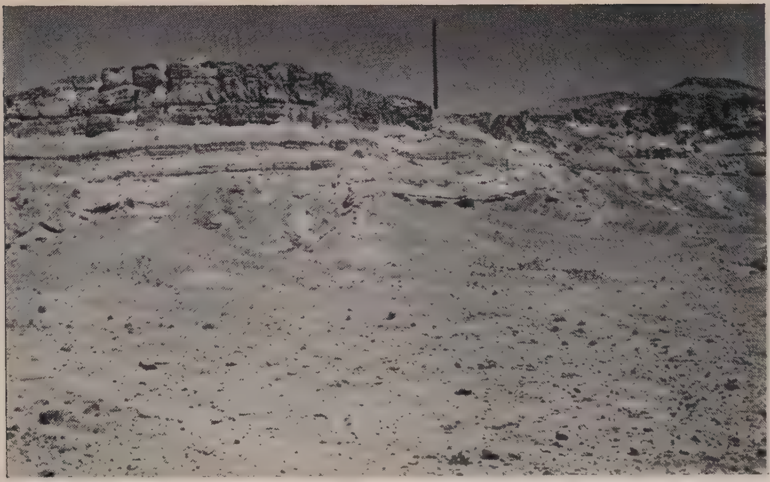
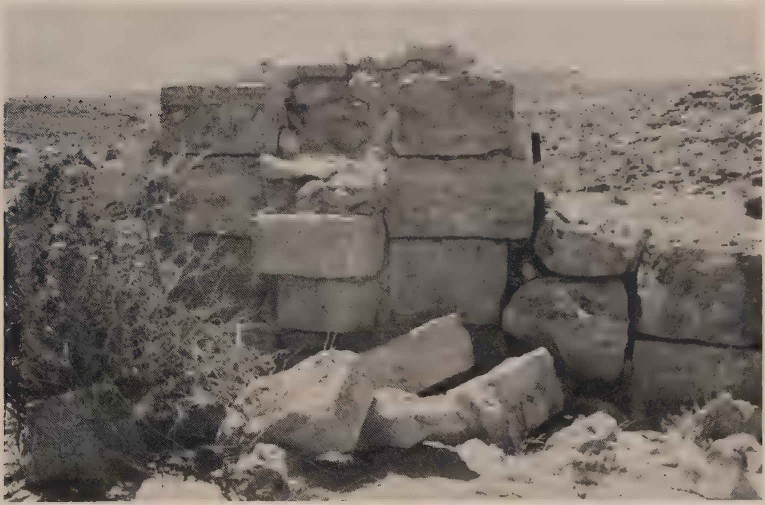
[1] The pottery therefore does not agree with Alt's theory that the two large forts are Asoa and Asuada, for they were still occupied in the fifth century and probably in the sixth (Notitia Dignitatum and Beersheba tax-edict).

[2] A typical window of this kind in the Kurnub building measures 0.071 × 0.065 metres, 28 × 2½ inches.

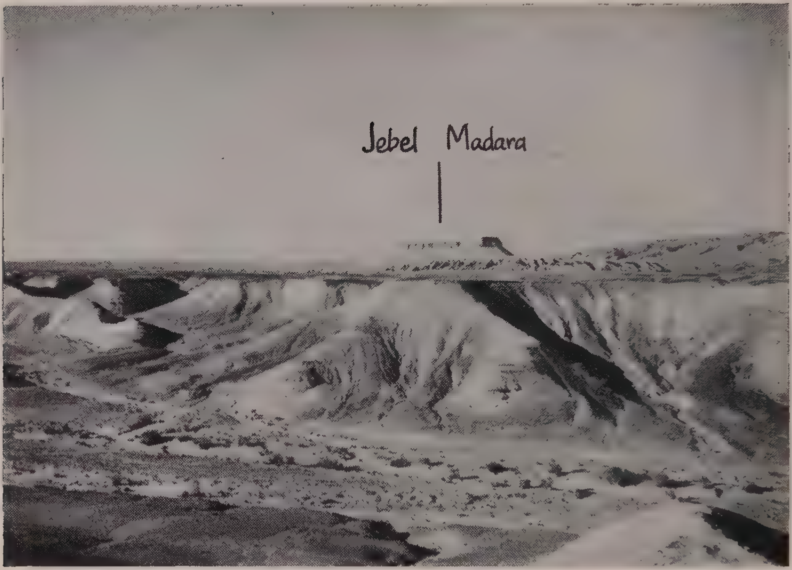
The question of the relative dates of the two buildings at Qasr Wadi es Sīq is not likely to be settled without excavation. Bellerby's plan makes some additions to Frank's.



THE ASCENT OF NAQB EL MHAMLA. THE GREAT CLIFF WHICH SURROUNDS WADI RUMAN IS HERE 700 FEET (200 METRES) HIGH. SEEN FROM THE SOUTH-EAST

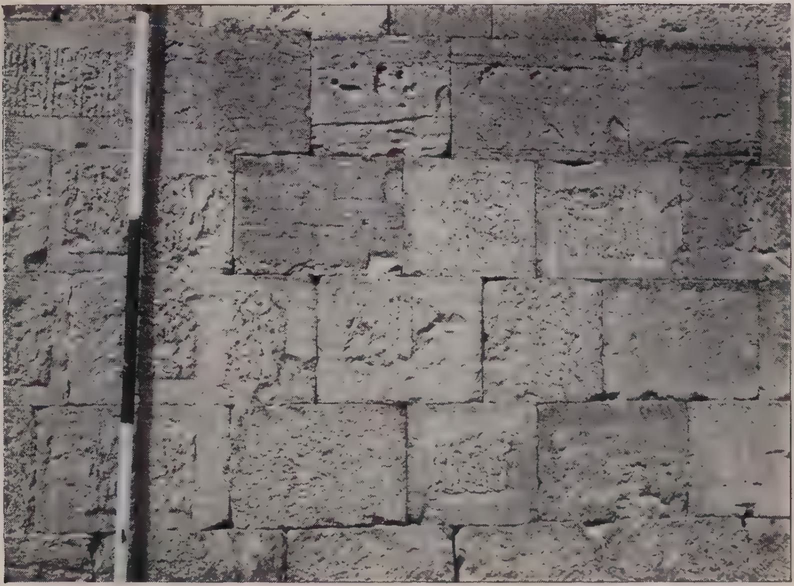


BUILDING NEAR THE HEAD OF NAQB EL MHAMLA. INNER FACE OF WEST WALL, SHOWING CONSTRUCTION IN SECTIONS WITH STRAIGHT JOINTS AND THE PROJECTING STONES OF ALTERNATE SECTIONS. THE DIVISIONS OF THE SCALE ARE 0.1 METRE LONG

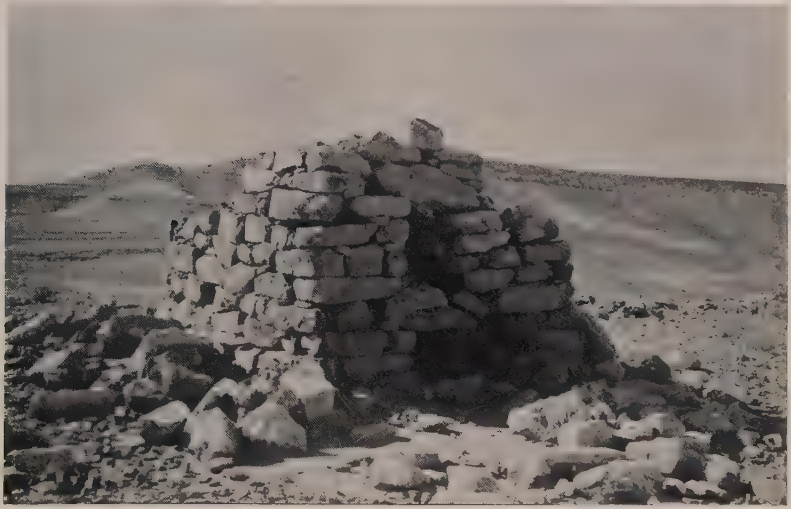


JEBEL MADARA FROM THE EAST-NORTH-EAST. BARE ERODED LIMESTONE PLATEAU IN THE MIDDLE DISTANCE, A WADI WITH SPARSE BUSHES IN THE FOREGROUND

'AIN KHARUF, BUSHES AND REEDS AND SALT-BLACKENED EARTH. IN THE DISTANCE THE ARABA, SEEN FROM THE WESTERN FOOTHILLS



KURNUB, THE EAST WALL OF "BUILDING A" SHOWING DRAFTED BLOCKS. THE DIVISIONS ON THE SCALE ARE 0.5 METRE LONG



RUJŪM SFAI. THE BEST PRESERVED BUILDING, TWO METRES HIGH. OPENINGS IN THE EAST WALL AND HEADER-AND-STRETCHER WORK AT THE CORNERS

followed up by work on the ground and a study of modern conditions, would be valuable. To the east there are many springs in the valleys just above the Ghor and the Araba, some of which may have unsuspected sites like that above ‘Ain Kharūf. . . . In fact it is evident that we are at the very beginning of our work in the Southern Desert. Our field of vision there is widening, and it will be a long time before our journeys fail to produce new sites or new facts about old ones.

THREE GREEK INSCRIPTIONS FROM THE SOUTHERN DESERT

By G. E. Kirk

The following inscriptions were found by me in May, 1938, when travelling in the Southern Desert for the Archaeological Survey of Palestine, directed by Mr. P. L. O. Guy, Director of the British School of Archaeology in Jerusalem.

(1) (Fig. 5.) Found at Kurnub, built into the south wall of the police-station, 1.5 metres from the ground and rather nearer the west than the east end. It is a limestone block, 0.435 metres wide and 0.26 metres from top to bottom, but may have been recut. It has been pointed with blue-black modern mortar which hides its edges and perhaps parts of letters on its left-hand edge. The letters are in red paint, 0.04–0.065 metres high. From a tracing :

· θ.οσ ·σ
· ἅγιος ·σ
· ἀγαθὸς ·σ

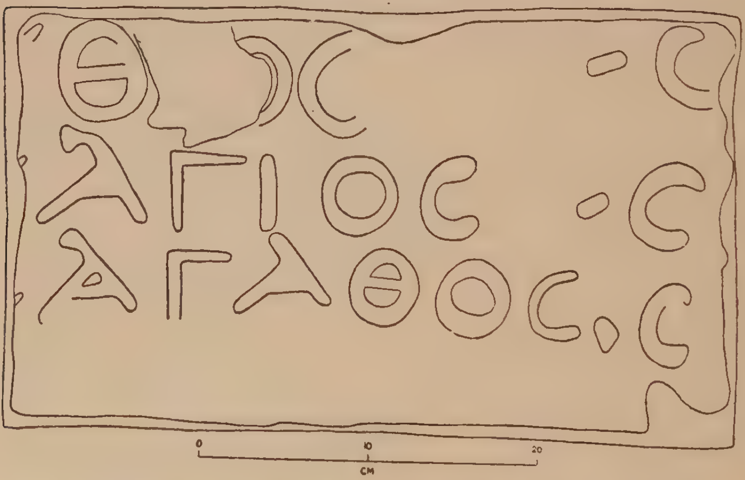


FIG. 5. PAINTED INSCRIPTION ON LIMESTONE BLOCK AT KURNUB

The short stroke before the final σ in each line is evidently a punctuation-mark. The short stroke at the beginning of each line may be a punctuation-mark also, for it comes at the beginning of a word in lines two and three and probably in line one also ; but it may be part of a letter hidden by the mortar.

1. We should probably read θ[ε]ός. The space between it and ·σ was evidently left blank. The σ at the end of each line is perhaps the beginning, or the abbreviation, of σωτήρ. *cf.* H. Linssen, Θεὸς Σωτήρ, *Jahrbuch für Liturgiewissenschaft*, VIII (1928), 1 ff. No σωτὴρ-formula with θεός is found in Nestorian liturgies, since that sect insisted on the difference in personality between the Almighty and Jesus the Saviour. On the other hand, such formulae were specially frequent in Monophysite Egypt. (Linssen, 16 ff., 21, 47.)

3. ἀγαθὸς σωτήρ is found four times in liturgies, and it is significant that two of these are Egyptian (Linssen, 39). An inscription from Lycaonia has]σ σωτὴρ ὑπεράγαθε (*Supplementum Epigraphicum Graecum*, VI, No. 441).

(2) and (3) were found together in a cave in Wadi Jarāba, (Map Reference, Africa 1 : 125,000. Sinai Peninsula. Sheet $\frac{\text{North H-36}}{\text{F-III. \& Part of IV}}$, Wadi Fa'i. C9. Not marked.) The cave is on the north side of the wadi, 20 metres above a tilh-tree which grows at a point where the wadi reaches the middle of a northward curve. It is ten minutes' walk east of the junction of Wadi Abu Rukaiba with Wadi Jarāba, and thirty-eight minutes east of the track between Tell el Milh and the Ghor which goes north from Wadi Jarāba by way of Wadi Naqb Sfai. The cave is a rough semicircle 8 metres in diameter. The west wall has been dressed to a smooth surface over a small area, and on it are scratched these two Greek graffiti and drawings of four birds and animals. There were also two animal figures crudely drawn in charcoal over (2), and wasms (tribal marks) cut in the rock. Tracing from rubbings.

(2) (Fig. 6.) 0.54 metres long. Letters 0.03–0.075 metres.

μνησθῇ Ζοραιθα
κ λ τ λ χ ν τ π ρ̣ θ λ σ
α α α α α α α α̣ α α α α

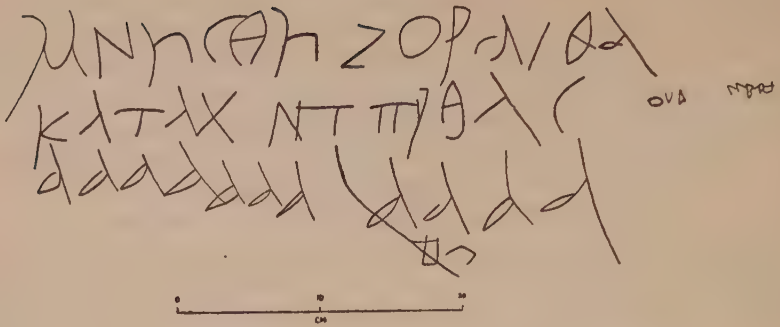


FIG. 6. GRAFFITO NO. I FROM A CAVE IN WADI JARĀBA

1. Ζοραιθα is probably a Semitic feminine name, though I cannot find another example of it, and the termination-αιθα is unusual.

2–3. We should probably take a consonant from line two and an alpha from line three alternately. This gives us a nonsense line, καλὰ τὰ λάχανα τὰ παραθαλάσα, which I suppose means " Good are the vegetables at the seaside." Mr. Marcus N. Tod has reminded me that there are similar English jeux d'esprit, for example the well-known " Persevere, ye perfect men ; ever keep these precepts ten," referring to the Ten Commandments; or on a more worldly, but still exalted plane, " Old port for orthodox Oxford dons."

Below the inscription are two uncertain signs, and to the right in another hand is ουα μβ. +. *Cf.* the enigmatic symbols ουα, ου ασσ, ασσ ου which appear in the upper corners of three Christian gravestones at Auja Hafir, Nos. 36 a and b and 40 (=Alt, *Die griechischen Inschriften der Palaestina Tertia* (Berlin and Leipzig, 1921), Nos. 137 a and b and 139). Professor Casper J. Kraemer, Jr., has suggested to me that they have a magical meaning.

(3) (Fig.7.) 0.45 metres long. Letters 0.02–0.04 metres.

σιμαθακαιαμαλχαμ̣αν
δαελ̣αασαβηουαι̣εβλακ

Except for the three dotted letters the reading is certain, yet I do not see how it should be divided into words.

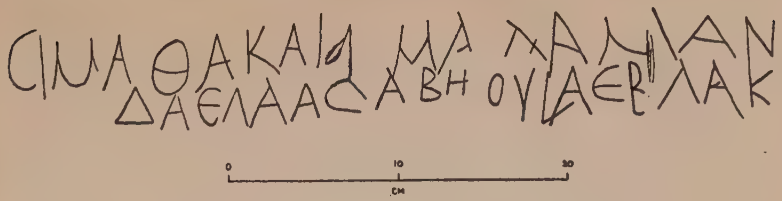


FIG. 7. GRAFFITO NO. 2 FROM A CAVE IN WADI JARĀBA

1. Σιμαθα is perhaps a Semitic feminine proper name from the root שים (*cf.* Wuthnow, *Die semitischen Menschennamen*, 109).

2. The fourth letter may be λ or α. αβηου is perhaps the proper name 'Αβηους, *cf.* Wuthnow, 9.

The letters are more regularly formed than in (2) and the alpha, with one exception, has the epigraphic form A, not the cursive form λ which rules in (2).

EXCAVATIONS AT TELL ED-DUWEIR

The Wellcome Marston Archaeological Research Expedition to the Near East

Lecture given at the Wellcome Research Institute, London, 11th July, 1938

By C. H. Inge

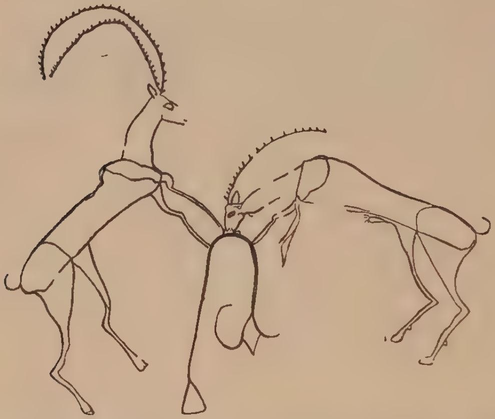


FIG. 1. DESIGN INCISED ON WATER JAR BEFORE FIRING. FROM HOUSES, ZEDEKIAH PERIOD

I EXPECT you all know the unhappy circumstances in which the sixth season's work was completed. We had been in the field for less than two months, when Mr. Starkey was murdered by bandits on the road between our camp and Jerusalem. Naturally our first thought in our distress was that work should continue as our leader would have wished. Mr. Harding, who first brought us the dreadful news, encouraged us in this and used all his efforts to enable us to carry on. You will remember him as Mr. Starkey's chief assistant until two years ago, when he was appointed Chief Inspector of Antiquities in Transjordan. The trust of our supporters at home, Sir Charles Marston and the Trustees of the late Sir Henry

Wellcome—Mr. Hudson Lyall, whose recent death we also mourn, Sir Henry Dale, Mr. L. C. Bullock, Mr. Martin Price, and Prof. T. R. Elliott, together with the encouragement of Sir Robert Mond, who was in Egypt at the time, permitted us to continue the work. The loyalty of our Arab workers and neighbours was such that we did not have to close down for a single day. We are also deeply indebted to every department of the Government of Palestine with which we had dealings, and especially to Sir Arthur Wauchope, who was at that time High Commissioner, and to Mr. Keith Roach, the District Commissioner. Sir Arthur Wauchope gave Mr. Harding special leave, so that he has been able to help us every time a difficulty arose. It is hoped that he may be able to join us in London next winter to take charge of the publication of such work as has been completed at Lachish during the last six years.

It is not necessary for me to say much in memory of Mr. Starkey because his work is known to you, but I would like to say this : It was due to his genius for organization that we were able to carry on the work as smoothly as we did. Each member of the staff and every one of the Arabs, down to the smallest basket boy, knew what his job was, and the rules he had to keep. In the same sense, the plans for excavation were laid so surely and so far ahead, that all the work we did this season and whatever work may be done at Lachish in the future, seems to be under his personal direction. We pray that his memory may be honoured in the continuance of that research.

I will begin the account of the season's work by disposing of two old friends, the great shaft and the Late Bronze Age temple. The shaft, it will be recalled, is a huge rectangular pit cut in the rock just inside the city wall at the south-east corner. The length and width are about eighty feet and seventy feet respectively and the depth about eighty feet. To save clearing out the enormous content of soil, a system of tunnelling was used, and a year ago Mr. Starkey announced that, by that method, three of the corners had been examined at the bottom. It remained to drive another gallery along the west side to get a view of the north-west corner, and then to attempt the most difficult task of all, to tunnel to the centre of the shaft at the bottom. Both these objects were achieved in the first month's work. It was a relief when no further discovery was made which would have necessitated more digging of that kind.

Those who made the shaft in the seventh century B.C., left that gigantic work unfinished. Thus the floor when left was in a most uneven state. The deepest workings were to the south and as our first tunnel this year ran from south to north, in one place the workmen had to dig for about twelve feet almost vertically upwards—quite a new departure in archaeological method.

The tunnel, from the middle of the west side to the centre of the shaft, was the most dangerous task of all. It was necessary because hitherto only the edges of the pit had been seen. There were two possibilities: one, that the ancient work had not been abandoned altogether, but that a smaller shaft had been sunk in the middle. The reservoir at Gezer had a ledge half way down.[1] The other possibility was that the shaft had been cut round an earlier well, which had given a clue to the chances of finding water. There are signs that the shaft leading to the water passage at Megiddo was made in this way. Neither of these suppositions was correct. The unfinished nature of the bottom was the same in the centre as at the sides, and the same steep slope from north to south continued across the middle.

One amusing find rewarded our labours. At the north-west corner a boulder of hard rock interrupted the neat angle, on which the ancient quarries were engaged when the work was abandoned. The rock was too hard to cut back, and to cut it right out would have made an even worse disfigurement. So they hammered it back as best they could and in the resulting boss someone must have noticed a resemblance to a human head. (Pl. XIX.) This was roughly accentuated and the result was not an artistic treasure, but probably the only piece of life-size sculpture from the Judaean period in existence. Probably no one will ever see the original again, for three weeks after the work was finished the tunnel fell in, and so now it lies buried under some eighty feet of rocks and earth. The treatment of the beard is worthy of comment; it seems to have an obvious connection with the stylized beards of the great Assyrian sculptures of the period. It is quite possible that Assyrian fashions in hairdressing spread as far as the kingdom of Judah.

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[1] The reservoir should not be confused with the water tunnel at Gezer.

The object for which the shaft was constructed can never be discovered with certainty because it was never finished or used. When Mr. Starkey first discovered it, he thought it was the outlet he was looking for—a shaft giving access to an underground passage leading out of the city, probably to some water supply. Such a shaft exists at Megiddo, and on the Lachish reliefs from Nineveh there appears to be a doorway leading out of the city from a tower half way down the mound. Since our shaft was never finished it cannot have led to the passage indicated on the relief. Mr. Starkey suggested then that it replaced an earlier shaft, as it was certainly constructed during the century after the Assyrian invasion. It is, therefore, possible that it was constructed as a reservoir, to replace an earlier water system. The great open area, east of the Palace Fort, uncovered this year, would have formed an enormous catchment area draining directly towards the shaft. It has been assumed that the chalk plaster covering this area was taken from the quarrying of the shaft, in which case the two operations may have been part of a single scheme.

Work in the shaft has been, on the whole, a series of disappointments, but there is no doubt that it gives a surprising glimpse of what was possible in the way of organized public works in the time of the later kings of Judah.

The Late Bronze Age temple built on the filling of the Middle Bronze Age fosse was also cleared up. The excavations of this quite small building have been spread over five years, because of the flooding which inevitably takes place each season. The temple was already flooded when camp opened in November, but work was possible on the filling behind the east wall. This was cleared out successfully before the next rains, but the lower areas were not dry enough until March. More rubbish pits belonging to the middle period of the temple were found. Though the faience and ivory treasures, found in past seasons, belong to this period, no such objects were discovered in these pits and it is obvious that these ornaments were treasured while they were new, only to be broken and thrown away when the temple administration declined some

100 years later, for they were found with pottery of the latest period.

Only one new architectural feature came to light this season, and that was a blocked-up doorway in the east wall of one of the priests' rooms behind the shrine. The wall in which the door was built also seems to be later than the other walls of the room. It is built parallel with the almost vertical scarp of the fosse and probably replaced a wall which had collapsed owing to the pressure of earth and stones, which must have accumulated rapidly at the base of the slope. The door would soon have had to be blocked up for the same reason. These changes must have been made late in the second phase of the temple or early in the third.

When we were able to resume work inside the temple in March, our chief interest was in a series of rubbish pits belonging to the earliest levels. These pits were, of course, outside the original structure, although they were covered by the later enlarged building. Like the later pits, they were full of animal bones and contained most interesting pottery. The finest piece is a polychrome vase decorated with four metopes containing a fish and a bird and two horned animals. (Pl. XX, Figs. 1 and 2.) The fish undoubtedly represents a tunny; the curved beak of the bird suggests an ibis, and the animals are probably ibex. Other pottery found in these pits included a large ceremonial cooking pot with raised decoration on the base and a brazier which perhaps went with it.

The presence of the polychrome vase which belongs to a class dated by Mr. Heurtley of the Department of Antiquities in Jerusalem, not later than 1550 B.C., together with the prevalence of carinated bowls of the so-called "Hyksos" type, suggests that the temple was constructed earlier than had first been supposed. This will give a lifetime of at least 150 years to the earliest building, and about 350 years to the whole cult. This year there is some excellent evidence for the final date of the earliest temple. On top of the remains of a wall of this structure, and almost underneath the altar of the second temple, we found a small faience plaque of Amenhetep III. It could only have got into the position it occupied during the reconstruction. Mr. Starkey, on other grounds, dated this reconstruction to just before the reign of Amenhetep III. On this new evidence we must lower the date so as to include it in that reign. It is not likely to be later, and it is most appropriate that the enlargement of the building should have occurred under Amenhetep III, whose association with the temple was proved four years ago by the discovery of the great lion hunt scarab.

In the last few days of the season's work, we demolished all parts of the building which were not founded on bedrock, and cleared out the fosse. The work was prolonged by the enormous number of boulders encountered. (Pl. XXI, Fig. 1.) These had obviously fallen from the scarp of the fosse, which had been cut almost vertical so that the hard limestone blocks weathered out by degrees from their softer matrix and became detached. The counterscarp at this point was quite vertical, making a right angle with the horizontal bed of the fosse. The filling below the temple levels contained quantities of cinders and fragments of burnt brick. We recovered the greater part of one brick and it is larger than any hitherto seen in later levels. It is perhaps the first hint of the destruction by fire of the Middle Bronze Age city.

The last thing to be exposed was the south side of the great wall which blocks the fosse to the north of the Temple. (Pl. XXI, Fig. 2.) We saw the north side of the wall during our first season in 1933. It proved to have no essential connection with the temple ; in fact it appears to be part of the original lay-out of the fosse itself. In the cutting of the fosse a bridge of rock seems to have been left to take the wall. Or alternatively the fosse was deepened after the building of the wall. It is hard to think of an explanation. It is not likely to have any connection with the flooding of the fosse, because there is a low level outlet further south to take away the water.

Cemetery work this year was mostly confined to an area north-east of the Tell adjoining last year's work. But two interesting finds outside the city walls came from another area. Just outside the camphouse at the foot of the mound were three tombs belonging to the XIXth dynasty. All had suffered, like other tombs in the area, from robbery and the quarrying activities of the builders of the Judaean period. The original entrances may have been cut in the counterscarp of the fosse which should turn the south-west corner of the mound at this point. One of the tombs contained the fragments of the first pottery sarcophagi found at Lachish. There were at least three of them, all smashed to pieces ; they were of a type previously found in Palestine, known as "slipper" coffins, a name which indicates their shape. The lid is moulded to represent the features of the dead. (Pl. XXII, Fig. 1.) The third coffin is unique in Palestine for its bears an inscription in hieroglyphs. (Pl. XXII, Fig. 2.) Unfortunately only the lower part of it was found. The rest, including the lid, may be lying at the bottom of the fosse. On the two sides, very crudely painted, are the goddesses Isis and Nephthys, elaborately mourning. The inscription down the front of the coffin is also crude. It is painted in red on a very thick white slip and well burnished. The whole style is reminiscent of the Duweir Ewer. As the date is approximately the same, it is possible that the two came from the same workshop. The inscription has been submitted to three experts, Dr. Alan Gardiner, Mr. Alan Rowe and Dr. M. A. Murray. Their preliminary readings differ in detail, but they all agree it could hardly have been written by an experienced Egyptian scribe. Dr. Gardiner suggests that the writer may have been better acquainted with Hieratic than with Hieroglyphs. The first part of the writing which remains may read : "Thou givest waters of the West. . . ." "waters of the West" is not a normal Egyptian phrase, although the west was a synonym for the abode of the dead, and so this is not, as might be expected, a mere copy of an ordinary coffin formula. On the other hand, it is a reasonable expression for a Palestinian to use referring to the Mediterranean. The words "waters of the West" open up endless vistas for those who like to inquire into the origin of religious and funerary ideas. It is perhaps too much to connect this inscription with the later myths of the islands of the dead beyond the western ocean but it is, at any rate, an interesting early example of the fusion of religious ideas.

Small objects from the tomb included a little scarab of turquoise matrix, beautifully set in a gold band for mounting on a silver ring. (Pl. XXIII, Fig. 1.) The gold band was decorated with chevrons of minute granulated work. The scarab is about half an inch long.

Not far off in the southern valley fragments of an anthropomorphic vase were found, associated with a mass of Late

Bronze Age sherds. Unfortunately it has not been possible to reconstruct the whole form, and several features, of which fragments were found, are not intelligible. The features are moulded on two sections of wheel made foundation, the surface is burnished and painted in red and black. (Pl. XXIII, Fig. 2.)

Some of the pits cleared in the cemetery area to the north of the mound were more than thirty feet below the present ground level. One result of this accumulation was that several tombs had remained sealed and undiscovered since the period of the burial, a condition hitherto a rarity at Lachish. One of the first discovered belonged to the Middle Bronze period. It was well sealed, but had been robbed. It contained about three burials, but there were no less than twenty-seven pots strewn about, including a number of very large jars. One bowl contained mutton bones, apparently left as an offering to the dead.

Further down the slope was another sealed tomb dating to the eighth century B.C. It appeared to be undisturbed except by an inflow of mud and water. The entrance was neatly cut and there were well made steps leading down into the small chamber. When the tomb was sealed up a lamp had been left burning just inside the doorway. There were only two burials, a man and a woman, and the equipment was less generous than that in the Middle Bronze Age tomb. The lady had four perfume flasks by her head, one an import from Cyprus, and a scarab by her hand. The man had an iron knife, a lamp, a bowl and an incense burner. There were two water jars on the floor.

At first it seemed that this tomb had been deliberately burnt, like the Late Bronze Age tomb in which nearly 200 scarabs were found last year. The walls and ceiling were covered with a thick layer of what appeared to be soot. The inside of the stone covering the entrance was also affected. Only the surface of the mud on the floor was blackened, and lower down there were no signs of burning. Later other tombs of earlier periods were found to be similarly affected, as well as an ancient water course in the same area. The pebbles and pieces of pottery were covered with the deposit wherever their surfaces were not embedded in soil. It was obvious that they had become blackened in their present position, and after they had been buried. It is impossible that fire was the cause, and chemical analyses show that the deposit consists of decomposed organic matter, probably of animal origin.

In this area, Late Bronze Age houses were uncovered. This is the third place where evidence has been found that the inhabitants of the city overflowed its walls in the prosperous period of the XVIIIth-XIXth dynasty. At a lower level we found cave dwellings which had been inhabited by troglodytes in the Early Bronze Age, about 2500 B.C. The finest of these caves was only partly filled with earth. (Pl. XXIV, Fig. 1.) It appeared to be entirely artificial, and had been enlarged casually from time to time in different directions, so that it was full of irregular recesses. A rough pillar had been left in the middle to support the roof. The whole chamber was about fifty feet long by twenty feet wide. The cave had been made by chipping the soft chalk rock with adzes having a cutting blade about one and half inches across. The tool was probably of polished flint, to judge by the marking which records every detail of each individual tool. (Pl. XXIV, Fig. 2.)

On the rock floor of the cave, and especially near the doorway, inside and out, were several skeletons. These were formal burials. Although they had no pottery or other objects with them, they were all decorously arranged in the contracted position so popular in the primitive cultures of many parts of the world. The bones were in good condition, and several of the skulls have been brought back for examination. But the cave was originally intended as a dwelling as is proved by a large stone-lined storage pit in the centre. The only complete pots remaining in this huge cave were a cooking pot, and a fine "holemouth" jar which was standing upright on the floor,

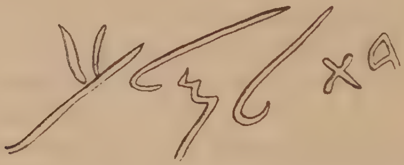

FIG. 2. INCISED LETTERING ON SHOULDER OF WATER JAR. LATE JEWISH PERIOD

still covered by a large potsherd which had been roughly shaped to form its lid. This jar, and many others of which we found the fragments, were incised with a potmark. These marks were very common in the early period and probably served to identify the owner or the maker. It is unlikely that they denoted measures of capacity, as the same mark is found on pots of different shapes and sizes.

In the neighbourhood were several other caves of the same nature and age, but none of them so fine as the one described. Most of them had had their roofs quarried away in later periods. Many produced quantities of pottery, most of it badly broken up. Particularly noteworthy were the large jars and vats with ledge handles and spouts. These vessels were probably employed in the practice of communal beer making and drinking. The people's habits may have resembled those of the modern Sudanese in this respect.

Several of these caves showed many distinct layers of occupation, but so far no progressive change in the pottery forms has been observed. The separate floors of the dwellings were artificially laid coats of crushed chalk. One of the caves had been re-used in the Iron Age, after being partially cleared out. A new entrance had been cut through the rock, and the difference was most striking between the Early Bronze Age tool marks and the long scars left by the pointed picks of the Iron Age workers. The cave produced an extraordinary mass of pottery, mostly of very coarse make, but some of it roughly burnished in the fashion common in the Solomonic period.

Evidence was obtained about methods of pottery making in the late Bronze Age. At the end of the season before last we broke into a cave far larger than any previously seen. It was too big an undertaking to begin at that time, but this year a large part was cleared, though circumstances prevented its completion. The cave was used as a stable during some part of the Judaean period, and the first things uncovered were the cattle-pen and the manger. At a lower level were many unbaked sherds, which indicated the proximity of a potter's workshop. A cave is a suitable place for such an establishment in a hot dry climate, because the even temperature and moisture prevents the clay from getting dry and brittle, while it is being worked. (Pl. XXV, Fig. 1.) Soon afterwards, in a pit at the side of the cave, two stones with pivots in the middle were found (Pl. XXV, Fig. 2), which had apparently been used as bearings for the wheel. The modern potter in Palestine works on the edge of a pit and kicks round a heavy fly wheel with his feet. The fly wheel is connected by a shaft to a turntable on the level of his hands. He thus has both hands free to work the clay. The fact that these two stones were found at a suitable depth in this pit suggests that this method was known at the end of the Bronze Age, the period of this workshop, though it is true that the stones were not in position when found. There were two or three circular depressions in the rock floor of the cave, which might well have held one or other of the two stones. If they were so used, they would have supported a more primitive turntable, One of the depressions in the floor was in front of a low stone seat, let into the wall of the cave, near the entrance. On the right of the seat was what appeared at first to be another pit, but it proved to be quite a large secondary cave. A spiral flight of steps, cut in the rock, led down to it, and stacked at the bottom was the potter's stock-in-trade. Among it was a single specimen of the so-called " bent bowl," a two handled form with one side deliberately bent up, and it has been suggested that these bowls received the blood of animals slaughtered for sacrifice. There were several specimens of " double " bowls, like candle sticks, which were perhaps used for pouring libations. Both these unusual shapes were common in the last phase of XVIIIth–XIXth dynasty temple, and it seems likely that much of the enormous quantity of pottery found there came from this factory. Pottery plaques were also made, as an unbaked specimen was found with part of a mould. A finished example showed a goddess holding a lotus flower in each hand.

Painted pottery is very common in this period, and in the pit which produced the pivots we found lumps of red and yellow ochre and pieces of bowls stained from use in mixing the paint. Other tools found were pebbles with one side highly polished from use in burnishing and cockle shells brought from the sea for the same purpose. Both pebbles and shells are still employed in Palestine for burnishing pots. A pointed bone found in the same place was probably used for making incised decoration. A large number of potsherds had been ground down so that their smooth edges might supplement the fingers of the potter in shaping his products. (Pl. XXV, Fig. 3.) On the floor of the cave were great lumps of slag which must have come from the furnace which has yet to be found. It may be outside the other end of the cave where there is probably another entrance. Owing to enormous falls of rock from the roof which had occurred at some past period, it was impossible to advance further without digging down from above.

Work on the levels of the mound began at the north end of the Palace. It was here that a burnt layer had been found at the end of the previous season containing Late Bronze Age pottery and pieces of small octagonal columns, immediately under the N.W. corner of the oldest part of the Iron Age Palace-Fort. A further examination this season showed part of a building of unusual importance. A series of plastered brick walls, all of them about five feet thick, came to light, and Mr. Starkey was of opinion that this building was the Palace of the Ramesside period in which, so far as present evidence goes, the city reached the height of its prosperity. All the walls had suffered from fire and some of them were burnt red right through. We were about to examine the filling of these rooms when Mr. Starkey's death occurred, and owing to the uncertainty of future excavations, it was not possible to proceed. Part of the building runs under the great mass of the Jewish Palace, and so it was unlikely to be finished in one season. It would have been wicked to leave a building of such importance half excavated. Furthermore, it would have been the first place on the mound where undisturbed Late Bronze Age deposits had been examined and it was considered inadvisable at that moment to break into a new level. So the walls were covered up again and there they remain, with their secrets, until the Expedition can return.

The labour set free from this area was put on inside the city gate. In the Expedition's recently published book on the Lachish Letters, the theory is set out which Mr. Starkey formed about three years ago, that the city was destroyed by Nebuchadnezzar twice in a period of ten years, that is, at each of the Babylonian invasions in which Jerusalem was captured. The latest Jewish city level represented merely the nine years' period between Zedekiah's appointment as king by the Babylonians and the final siege of Jerusalem. The two dates were conventionally 597 and 588 B.C.; the latter date marks the beginning of the second invasion, though Jerusalem did not fall till two years later. These two dates will be used when referring to the two destructions for which there is such ample evidence. But naturally all archaeological dates that are not supported by the most exact inscriptional evidence are always open to revision, on the production of fresh evidence or fresh arguments. There are, then, two burnt levels in the city and the pottery in them is indistinguishable. Evidence so far shows that the earlier city was packed with houses and strongly fortified, while the later city was thinly populated and protected by makeshift defences. It was of this second city that Jeremiah spoke when he described how the king of Babylon fought against Lachish and against Azekah that remained of the fenced cities of Judah. And it was in the gate house of this city that the Lachish Letters were found.

The 588 inner gateway has long been exposed (Pl. XXVI, Fig. 1), but a closer examination this year showed that part of the post-exilic reconstruction had not yet been removed. The blackened roadway ran under one of the jambs and by removing the latter the earlier face was exposed. The post-exilic gate had been deliberately made narrower.

In the spring of 1937 a wide street leading down from the middle of the city towards the gate was exposed, with remains of burnt houses on each side (Pl. XXVI, Fig. 2). It was established that this roadway belonged to the 597 destruction. This season the road was followed down to a point just inside the gate. In doing so, the 588 road was cut through and it was found that no houses existed in that area at the time of the later destruction. The earlier road was lined by a row of houses or shops on each side.

The work exposed a small part of the 597 inner gate, and showed it to be a far more formidable structure than the later one (Pl. XXVII, Fig. 1). It was flanked on each side by brick towers supported on four or five strong piers with stone foundations. Two of the southern ones were exposed. Between them is a recess with a bench and some steps leading to a doorway. Stretching across the road between the two innermost piers—one of them was destroyed by a drain in the later period

—was a raised cobbled barrier forming an inner threshold. Anciently it must have been bordered by two wooden beams let into the ground. These have naturally disappeared leaving two grooves filled with ash. We are reminded of the passage in the Book of Nehemiah describing the rebuilding of the gates of Jerusalem : " But the fish gate did the sons of Hassenaah build, who also *laid* the beams thereof, and set up the doors thereof, the locks thereof and the bars thereof " (Neh. iii, 3). The purpose of the beams may have been to take the bolts of a pair of doors. This inner threshold is seventeen yards inside the later inner gate, and so, before 597, a person entering the city would have had to walk more than forty yards after passing the outer gate before he was through the fortifications.

There is a drain cutting the inner threshold, perhaps to take water from the roofs of the towers, but the drainage of the street ran down a side alley, which turns to the north just inside the gate. It was surprising to find the level running down that way and it would be interesting to know where the water ran. In any case, the outlet was blocked at the time of the destruction, for two or three feet of pure mud covered the lower parts of the road. The fall of the gate towers blocked any outlet in that direction, and the later roadway was made about six feet higher, and a deep drain was cut to take flood water out through the gate.

The houses near the gateway were terribly burnt. Stone walls would hardly stand up when exposed, and brick walls were burnt red and solid right through. One house had a bin full of olive stones. The heavy mud and plaster roof in this room had formed into a solid mass with the heat and could hardly be broken with a pickaxe. Another house had brick walls strengthened with vertical stones about four feet high. We found the base of a stone staircase leading to the roof or to an upper room. In the fallen debris covering this house we found the upper part of a jar inscribed with the Hebrew letters " BTLMLK," showing that the jar held the royal measure of capacity which is transliterated " Bath " in the Bible. From the size of the jar it seems likely that the jars stamped with the LMLK seal on the handle also held this amount. (See Fig. 2, p. 248.)

At the same time, work on the east side of the Palace produced more evidence of both destructions. The Palace-Fort appears to have been burnt to the ground in 597, and not to have been rebuilt. The brick upper structure fell down, and on its ruins a row of poor houses was built, during the reign of Zedekiah, against the stone foundations. One of these houses produced a charming drawing of a pair of ibex eating a plant. The drawing was incised on a water jar when it was standing upside down before being fired, while the clay was soft. Palestinian potters still stand their larger pots upside down to dry, and this drawing may have been made by some artistic idler, perhaps a child, visiting the workshop. The drawing is unusually free from stylization, and the pose of the animals seems to be observed from nature and not copied from other drawings. An interesting point is that the root of the plant is represented by a triangle. Arab children whom Miss Tufnell has encouraged to draw out of their own heads, have sometimes used the same curious convention in representing roots. (See Fig. 1, p. 240.)

Another room in the same row produced two potsherds inscribed in ink. One of them is a small fragment written on both sides. Very little is legible but it appears to be part of a letter like the Lachish Letters. It was found below the burnt floor of the room. The second is of greater interest. It was lying blackened on the floor among the ashes of the destruction, and it is possibly a receipt like the inscriptions from Samaria. Its interest lies mainly in the fact that a large part of the pot from which it came was also found in the room. Part of the inscription is missing, but the date at the beginning is clear. It reads: "In the ninth (year)." One should not base too much on it but it may not be a coincidence that the last chapter of the Second Book of Kings opens with the same words: "And it came to pass in the 9th year of his reign (i.e., Zedekiah's) in the 10th month, in the 10th day of the month, that Nebuchadnezzar king of Babylon came, he and all his host against Jerusalem." A third ostracon was found this year among the burnt masonry fallen on the roadway at the foot of the south-west corner of the mound. It contains a list of names followed by numerals, the value of the figures remains uncertain. It is hoped to publish the ostraca more fully in a later number.

Directly under the row of houses described above were the remains of the steps which led up to the Palace (Pl. XXVIII, Fig. 1). They were buried when the walls of the Palace were burnt and fell down in 597. It should be explained that the floor levels in the Palace had been raised artificially some ten or twelve feet above the ground level outside. To the east of the Palace there was a wide area of open ground, plastered with white chalk, which has already been mentioned as draining towards the great shaft. The extent of this parade ground is as yet unknown, but it was certainly several acres, and must have offered a magnificent view of the Palace, itself seventy yards long. (Pl. XXVII, Fig. 2.) The steps led up from this open area to a platform against the wall, which led in turn to the corner of the building. There the entrance was fronted by a porch of some sort of which only the foundations remain. At the foot of the staircase, against the Palace wall, is a round drum of stone with little depressions in it. (Pl. XXVIII, Fig. 2.) Père Vincent, of the École Biblique Française, at Jerusalem, confidently compared it with a more elaborate stone at the foot of the main staircase of the Minoan Palace at Mallia in Crete. This stone was considered by the finders to be connected with ceremonial offerings of all kinds of grain. The period, of course, is much earlier but it is possible to regard the stone at Lachish as intended to receive offerings for the luck of the house, from those entering it on ceremonial occasions. If offerings of grain were ground on the stone, it might explain the depressions, which appear to be the result of use rather than to have been deliberately made.

At the foot of the staircase on the other side is another curious structure, a podium in three blocks, made of plastered rubble. Père Vincent was confident that this also was connected with religious ceremonies ; and that perhaps it was a base for an image or a symbol of some sort. On the other hand, there is no sign on the plaster that anything ever stood on it as a fixture ; it was possibly a mounting block, and it is pleasant to imagine the stout governor of Lachish being assisted into the saddle by a couple of strong slaves standing on each side of him.

The staircase is nearly four yards wide and is well proportioned. Unfortunately it is made of such soft stone that while buried it suffered considerably from the burrowing of moles. It would never have lasted long in use, and actually it covers the remains of at least one earlier staircase which it replaced. Only two steps of this early flight could be uncovered without destroying the later one. On the vertical face of the upper step was a schoolboy scribbling, including a picture of a lion and some small concentric circles made with a compass, and a few letters were scratched near the end of the step. The inscription turned out to be not, as one might expect, a name or a rude remark, but the first five letters of the Phoenician Hebrew alphabet in their conventional order, perhaps the work of a schoolboy airing his knowledge writing the equivalent of ABCDE until he reached the top of the step. Not, perhaps, a very wonderful discovery, but this is actually the earliest concrete evidence for the order of the alphabet in Palestine, and the first example of the Hebrew alphabet being learnt systematically. So Lachish has added one more fragment of knowledge to the history of writing.

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There were in camp this year, besides Miss Tufnell and myself, Mr. Holbrook Bonney, Mr. H. W. Pummell, Mr. and Mrs. Warren Hastings, Mr. James Kirkman, and Miss Veronica Seton-Williams. Mr. N. Shiah, who has been studying at University College, was with us for some weeks, and Prof. Hennequin of the École Biblique Française in Jerusalem also visited us. Miss Nina Cuming also spent the season in camp. I would like to thank all those have have helped us in the preparation of the Exhibition in this building, Captain Johnston-Saint, Mr. Rowles, and Mr. Port have again taken much trouble to help us with the details.

Our debt of gratitude to our supporters is one which a few words cannot express, but I hope that they will feel that their trust has been justified in the results of the season's work.

THE SPRING EN-ROGEL

By R. Macgregor

The spring En-rogel (Joshua xv, 7, etc.) is identified by Conder (Hastings DB. Vol. II, p. 174) with the spring Gihon (1 Kings i, 33, etc.).

The same writer, following Robinson, also identifies En-rogel with the pool of Bethesda of John v, 2 (Hastings DB., Vol. I, p. 279).

גִּיחוֹן is from גִּיחַ Aram. ܓܳܚ Arabic جاخ a stem whose meaning is "to spring forth," "to bubble up," which meaning reminds us at once of the "troubling of the waters" by "the angel of the Lord at certain seasons," in John v, 4.

Conder points out that this phenomenon is caused by the intermittent overflow from a natural syphon under the cave.

It is thus easy to think of Gihon and of the pool of Bethesda as being one and the same.

Can we extend this identity to En-rogel? If so, on what grounds?

En-rogel as it stands is taken as "spring of the fuller," *cf.* Stenning in Hastings DB., Vol. I, p. 711.

But against this rendering are two objections:

(1) We meet with "field of the fuller" (in Isa. vii, 3, xxxvi, 2; 2 Kings xviii, 17) but not with "spring of the fuller."

(2) כֹּבֵם and not רֹגֵל is the usual word for "fuller."

In fact one suspects that the present form עֵין - רֹגֵל is a corruption of an old name עֵין - עֲרֹג - אֵל "the fountain of the rising up of a god."

According to Ges. Buhl's *Handwörterbuch über das AT*, in Ethiopic and Minæan, ערג signifies "to rise up."

If this were the original name, we have a parallel now to the "springing forth" of Gihon, and to the "troubling of the waters" in John v, 4. Further, in the latter passage, the "troubling" is due to "an angel of the Lord," which is an instance of the well-known tendency of a later day to tone down an earlier crude anthropomorphism.

The name עֵין - עֲרֹג - אֵל could easily have become corrupted into עין - רֹגֵל as follows :

A careless scribe correctly enough copied the first word, with its initial ע. He carelessly omitted the initial ע of the next word, and left עֵין - רֹג - אֵל.

A later copyist attempted a correction and gave for the last two words one word, of the same sound, and it was a genuine Hebrew stem רגל.

He corrupted the name into its present form עֵין - רֹגֵל whose original form was עֵין - עֲרֹג - אֵל which points back to a very ancient time of animatistic belief in the god being the fountain.

CORRESPONDENCE

3 Electra House,
Haslemere,
13th July, 1938.

Dear Sir,

I have just been reading your interesting article in the P.E.F. Quarterly for 1935 on " A Scarab and Sealing from Tell Duweir." But may I suggest a very minor emendation of the reading of the name on the seal, that is, Gedal-iahu̲, the variant of Gedaliah. The sign seems so obviously a combination of , He, and , Waw, as these are represented in Phoenician II. (Plate I, P.E.F., 1935, p. 140.)

But the Scarab script seems to me to be Phoenician I, and in fact the lamedh, aleph and kaph are exactly those of Mesha, the mem is more like Mesha's than the other varieties, and the samekh is much more like that of Byblos in that it has a short and thickened upright. Moreover the absence of the yodh in Aḥimelekh points to a much earlier period than that of Gedaliah's seal. The scarab is, on these grounds, to be dated earlier than Mesha and so about the tenth century B.C. or earlier, in other words in the time of David. This would make it possible that the Ahimelekh referred to is the priest who assisted David. Dalman gives סְמָכָא, ind. סְמָךְ " support," in Aramaic, and it seems to me that a similar noun must have existed in Hebrew in view of the verb. In fact Gesenius-Kautzsch on p. 28 gives סָמֶךְ " prop," as the explanation of the letter-name.

The reading seems to me to be simply " s-m-k l-'-ḥ-m-l-k," " *support for Aḥimelekh.*" But the name of the person who supports Aḥimelekh does not appear. Is it to be inferred from the royal winged scarab that that person is the king, that is to say, David after his accession ? If so, we might read:

“ Sámkh ham-Málkh
L^e-’Áḥimálkh ”
or
“ Sémekh ham-Mélekh
L^e-’Áḥimélekh.”

“ *Support of the King for*
Aḥimelekh.”

Reverting to the seal of Gedal-iahu, my private opinion is that Yāhū is Yāh-U from Sumerian IA-U(N), “ *Lord Yāh,*” and that the same title in Hebrew was Ādhōn-Yāh, which contracted like so many -iah names to Adhōnai, which is to be thus explained and *not* as a suffix of the plural of excellence. There is thus this difference of meaning between -Yah and -Yahu names.

Yours truly,
Norman Walker.

REVIEWS AND NOTICES

Arbeit und Sitte in Palästina. Gustaf Dalman. Band V. Webstoff, Spinnen, Weben, Kleidung. 128 illustrations. C. Bertelsmann in Gütersloh, 1937. Price 22 marks.

Professor Dalman began his ethnological studies with a visit to Syria in 1899, and the first volume of *Arbeit und Sitte* appeared in 1928. It was reviewed in July of that year in P.E.F.Q.S. and welcomed as " the first volume of a proposed series of scientific observations on life and customs in modern Palestine, especially in connection with our understanding of the Bible." Since then the volumes have followed each other in orderly procession. The seasons of the year were first discussed with the animals and plants of the countryside, and folklore concerning them, next came agriculture, then bread, oil and wine and now the weaving, spinning and clothing. As in the other volumes, this one is divided into sections, each of which gives a description of the craft and its customs at the present day, followed by a commentary linking it with all that is known on the subject from the literature—the Bible—the Mishnah (that " deposit of four centuries of Jewish religion and cultural activity in Palestine " as Dr. Danby terms it) and many other sources. Actually the book is divided almost equally between the old and the new, and the contrast and resemblances are most illuminating ; some crafts have passed away, but others seem hardly to have changed at all and in some cases the very words used are similar.

The study begins, as all crafts must, with the raw material : wool, flax, cotton, silk, &c.

Wool gets a full meed of comparison between the old and the new ; the sheep shearing with its songs and sacrificing and feasting, the spinning and weaving of wool and also of goats hair are still a part of country life, as in Bible days.

Flax, on the other hand, so famous in olden days, has vanished from the land. Experiments in the Jewish colonies have met with some success, so perhaps some day Beisan will recover her fame for fine linen, and cultivators around will understand the riddle put to Solomon by the Queen of Sheba. She said : " The young panther leapt up, gave a bitter cry and his head was as the head of a reed. He became praise to the noble, shame to the poor, praise to the dead, shame to the living, the joy of birds and a grief to fishes." The wise king replied : " Flax, for it shoots up rustling in the wind, makes fine clothes for nobles, rags for the poor and winding sheets for the dead, is shame as the hangman's rope, feeds birds with its seeds, and makes nets for fishes."

Cotton is rare to-day, grown here and there chiefly in the Jordan valley, and it was never common in olden days. The late Hebrew writers called it *ṣemer gephen*, the " wool vine," a name suggestive of G. arboreum, a variety which is still occasionally grown as well as G. herbaceum.

Silk. For the culture of silk all examples given are naturally from Syria. Silk as a material had been known there ever since the Han silks first came in from China, and raw silk was already being woven in Sidon in the first century A.D. But at what date the silkworm, first brought to Byzantium by the monks in 552 A.D., was passed on to Syria is not known; the earliest definite account that Dr. Dalman can quote, of silkworms feeding on mulberry trees, is already of the twelfth century.

Dyeing is next treated and a full account of the famous purple of olden days brought up to date by references to R. Pfister's discovery of the true " murex " purple on textiles from tombs at Palmyra of the first century A.D. ; a list of dye-plants is also given, but few instances of their modern use, they have almost entirely been supplanted by synthetic dyes.

Spinning is noted for many places, on the hand spindle ; our spinning wheel seems never to have been in use, but a class of wheel spinning akin to that of a rope walk is cited from Aleppo.

The looms in use in Palestine to-day are of three types, the ground loom, the vertical loom, and the treadle loom (hand loom). Excellent descriptions and good photographs are given of these looms, but some diagrams of parts and processes would have been very welcome to those who have not actually seen them at work.

The ground loom. This is often called the Beduin loom for on it all their tents are made. It can be quickly pegged out on the ground, and rolled up like a bundle of sticks for transport and therefore is well suited to the nomad life. But in Palestine it is also used by women in villages for making rugs, hammock cradles and sacking. Being identical with the XIIth dynasty loom of Ancient Egypt, one may safely assume that it was known in ancient days. Dr. Dalman enjoys the suggestion that it was while Samson was reclining near a loom of this kind that Delilah wove his hair so firmly to the web that when he rose up from sleep the whole loom came up too, web and beam and pegs and all!

The vertical loom. A much rarer type in Palestine than the foregoing, used by men, chiefly for goats hair sacking, at Hebron, Nablus, Safed and in Syria. This is probably St. Paul's loom; Dr. Dalman's discussion of it appears to me to support this view, as well as the account given by Mr. H. V. Morton who found it still in use in Tarsus for the making of tent cloth.[1] As it is very near to the Ancient Egyptian looms of the XVIIIth–XIXth dynasty, it may have been in use in Palestine in early days. Dr. Dalman most convincingly shows that it must have been the loom used in the time of the Mishnah, i.e. c. second century B.C. to second century A.D. It is possible that the warp weighted loom of the Greeks was also in use then, as loom weights have been found in excavations, but all the Mishnah references seem to apply to a loom like this vertical one, having both upper and lower warp beams.

The treadle loom (*hand loom*). There are still a certain number of treadle looms up and down the country, and Dr. Dalman gives instances of towns and villages known to have been weaving centres which have now but few or no looms working. Mejdel, near Gaza, which in 1909 had 500 looms, and a few years later was reduced to 200, is one of the centres that still survive, probably because the weavers early adapted themselves to the use of imported cotton yarn.

There certainly was once a good deal more weaving in Palestine than at the present day, but it does not appear that the craft was ever so well developed there as in the Syrian craft centres like Damascus, Aleppo or Homs. There are still a few weavers in wool, e.g. at Bethlehem, with a speciality of coats for women, and at Nablus, Ramallah and other places, for abayas and bishts (cloaks and coats for men).

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[1] H. V. Morton, *In the Steps of St. Paul,* pp. 63, 64.

Dress. The last part of the book is devoted to the dress of men and women, and both are very fully described down to details of head coverings and shoes, but in the section on the Girdle I find no mention of the tablet woven belts from Syria so commonly affected by men, perhaps the fashion has grown of late years.

The dress of the women, as is well known, is both interesting and beautiful and often adorned with embroidery ; it varies from district to district and even from village to village, and this is the first serious attempt to give the distribution of the types of dress. The photographs of people wearing local dress are good (as are indeed all the illustrations) and there are abundant diagrams of the way the garments are made. Only the colour is lacking. How one wishes that this book could be followed by a more extended study of the distribution of the dresses with typical examples shown in colour !

It is difficult to find anything else lacking in the book. On the craft side, the descriptions are admirably clear, and full of the details only gained by careful personal observation, while the wealth of references on the historical side is such as can only be given by an Orientalist like Dr. Dalman.

This volume is indeed, as are all those in the series, quite indispensable to the student of things Palestinian.

The Committee have to acknowledge with thanks the following :

Annals of Archaeology and Anthropology of the University of Liverpool, XXV, 1–2, June, 1938. Explorations in Cilicia, Report II, by J. Garstang.

The Antiquaries Journal, XVIII, 3, July, 1938.

Bulletin of the John Rylands Library, XXII, I, April, 1938. Israel's Sojourn in Egypt, by H. H. Rowley.

Blackfriars, June, 1938. Père Lagrange, by L. H. Vincent.

The Expository Times, July–September, 1938. Recent Biblical Archaeology, by J. W. Jack (September).

Great Britain and the Near East, July–September, 1938.

Journal of the Royal Anthropological Institute, LXVII, July–December, 1937.

Journal of the Royal Society of Antiquaries of Ireland, LXVIII, 1, June, 1938.

The New Judaea, June–August, 1938.

Recent Geographical Literature, Maps and Photographs, 59, May, 1938.

Religions, 24, July, 1938. Special Bible Number.

The Scottish Geographical Magazine, 54, 4, July, 1938.

American Journal of Archaeology, XLII, 2, April–June, 1938. The Fourth and Fifth Seasons of Excavations at Antioch-on-the Orontes: 1935–6, by W. A. Campbell.

The American Journal of Semitic Languages and Literatures, LV, 3, July, 1938. Chronology of Darius' First Year of Reign (concluded), by A. Poebel.

Bulletin of the Metropolitan Museum of Art, New York, July–September, 1938.

Geographical Review, July, 1938.

The Jewish Quarterly Review, XXIX, 1, July, 1938.

Journal of the American Oriental Society, 58, 2, June, 1938. The Tenses of Ugaritic, by A. Goetze.

Bulletin de Correspondance Hellénique, LXI, 11, 1937.

Nouvelle Revue Théologique, July–August, 1938.

Revue Biblique, 47, 3, July, 1938. Exploration de la région de Salt, by R. de Vaux.

Syria, XIX, 2, 1938. Les Archives Epistolaires du Palais de Mari, by G. Dossin. Textes alphabétiques de Ras Shamra provenant de la IXme campagne, by C. Virolleaud. Nouvelle lettre d'Ugarit en écriture alphabétique, by E. Dhorme.

Archiv für Orientforschung, XII, 3, 1938. The Aramaic Incantation in Cuneiform, by C. H. Gordon. Neue Bruchstücke des Berichtes über Sargon's achten Feldzug, E. F. Weidner. Groupings of Deities in the Ritual Tariffs from Ras Shamra-Ugarit, by T. H. Gaster.

Orientalistische Literaturzeitung, July–September, 1938. Neue Belege für ארת "Herrin," by O. Eissfeldt. Review of N. Perrot, Les Représentations de l'Arbre sacré sur les Monuments de Mésopotamie, by W. Andrae.

Biblica, 19, 3, 1938. Trois noms de Personnages bibliques à la lumière des textes d'Ugarit, by P. Joüon.

Archiv Orientální, X, 1–2, June, 1938.

Al Mashriq, January–March, 1938.

Bible Lands, July, 1938.

Peak in Darien, ed. A. A. L. Simpson.

Journal of the Transactions of the Victoria Institute, LXIX.

The Origins of Early Semitic Ritual, The Schweich Lectures for 1935, by S. H. Hooke.

The Buildings of Qaytbay, ed. by L. A. Mayer.

Annual Report of the Department of Agriculture and Fisheries, Palestine, for the year ended 31st March, 1937.

The following are gifts from the Department of Antiquities, Palestine :

Guide to the Historical Site of Sebastieh, by R. W. Hamilton.

A Short Guide to the Exhibition illustrating the Stone and Bronze Ages in Palestine, by J. H. Iliffe. Palestine Archaeological Museum.

Gallery Book. Stone and Bronze Ages. Palestine Archaeological Museum.

PALESTINE EXPLORATION FUND

ANNUAL REPORT

AND ACCOUNTS

WITH

LIST OF SUBSCRIPTIONS

FOR THE YEAR 1938

PALESTINE EXPLORATION FUND
2 HINDE STREET, MANCHESTER SQUARE, LONDON, W.1

THE PALESTINE EXPLORATION FUND was founded on 22nd June, 1865, for the purpose of conducting systematic and scientific research in the Holy Land.

It was established on the basis of the following rules:—

1. It was not to be a religious society. That is to say, it should be pledged not to advocate or attack any form of creed or doctrine.
2. It was not to adopt or to defend any side in controversial matters.
3. It was to be conducted on strictly scientific principles.

These rules have been jealously observed. The Society's organ, the QUARTERLY STATEMENT, is open to all opinions, while it records as facts only the actual discoveries and results of its exploring officers.

Although the Society is not a religious society, strictly so called, its work necessarily possesses unusual interest for Bible Students of all denominations, who find in the results obtained by exploration much that confirms and illustrates the historical truth of both the Old and New Testaments.

In the course of its existence, the Society, with limited funds at its disposal, has done an immense amount of work, and published the results in books, papers, maps, plans and photographs, primarily for the benefit of its subscribers, and for the advantage of students of the Sacred Scriptures.

PALESTINE EXPLORATION FUND

ANNUAL REPORT FOR THE YEAR 1938

It is with the deepest regret that we record the deaths, in October, 1938, of two very distinguished supporters of the Fund. On the 22nd of that month died Sir Robert Mond, who had been associated with the Fund for twenty years and had been for eight years its joint Honorary Treasurer. An obituary notice was contributed by Professor J. L. Myres for the January, 1939, issue of the PALESTINE EXPLORATION QUARTERLY. Sir Robert's death is a grievous loss to the Fund. On the 24th of the same month there died Professor A. R. S. Kennedy, who had been for the past ten years the Fund's Honorary Local Secretary in Edinburgh. Dr. Kennedy was a scholar of great distinction, of high repute in the field of Biblical Archaeology. An obituary notice from the pen of Professor N. W. Porteous is to appear in the PALESTINE EXPLORATION QUARTERLY for April, 1939.

As a result of the condition of the country only a limited amount of work on the Archaeological Survey of Palestine was possible during 1938. But considerable increase to our knowledge of the Southern Desert resulted from the exploration of that region by Mr. G. E. Kirk, as archaeologist, and Mr. D. Bellerby, as architect ; the work being generally directed by Mr. Guy. A report was printed in the QUARTERLY for October, 1938. Work on Sheet 7 of the official Palestine Topographical Map on the scale of 1 : 100,000, the Jaffa-Tel Aviv sheet, has provided reports on two structures of the Arab period, viz., El Aneiziyeh, an underground masonry cistern, dated by an inscription to 789 A.D., and Jisr Jindas, a bridge near Lydda, dated, also by inscriptions, to 1237 A.D. During 1938 the Fund contributed £139 10*s*. to the cost of the Archaeological Survey.

The publication of the full reports of the excavations at Samaria, during 1930–35, is proceeding, and the Volume on

The Early Ivories from Samaria, by J. W. Crowfoot and Grace M. Crowfoot, has recently been issued. This is a beautiful, admirably printed and illustrated book, of the highest authority on the subject. It will be welcomed by all the supporters of the Joint Expedition. Other volumes on Samaria-Sebaste will follow.

It was mentioned in last year's report that it was in contemplation to purchase a modern museum case, with part of the legacy from the estate of the late Lady Watson, as a memorial to Sir Charles and Lady Watson. This has been done. We are much indebted to Mr. Sidney Smith and to Miss Kathleen Kenyon for their help in the matter, and for kind assistance in the re-arrangement of the museum generally. The new case is a valuable addition to the property of the Fund. The inscription on the case reads :

" This case was provided in 1938 in memory of Colonel Sir Charles Moore Watson, K.C.M.G., C.B., by a legacy from Geneviève, his wife. Both were for many years friends and benefactors of the Palestine Exploration Fund."

To the series of casts of inscribed stones in the museum have been added casts of the Hittite hieroglyphic inscriptions from Hamath in Syria, which have been some years in possession of the Fund. The inscriptions were discovered in 1872, but their decipherment as dedications to the goddess Ba'alath, by Urhilina, King of Hamath, in the eighth century B.C., is an achievement of recent scholarship.

The following lectures were given at 2 Hinde Street, during 1938 : *Archaeological Methods in Palestine*, by Miss Kathleen Kenyon ; *The Great Epochs in Biblical History*, by Prof. Stanley A. Cook ; *Phoenician and Syrian Ivory Carving*, by R. D. Barnett, M.A. ; *The Structural Decay of the Church of the Holy Sepulchre at Jerusalem*, by William Harvey ; *A Map of Palestine of the Crusades*, by F. J. Salmon, C.M.G. ; *Present-day Knowledge of the Hittites*, by Prof. S. H. Hooke.

The Annual Exhibition of the Egypt Exploration Society was held in the Fund's rooms from 23rd June to 14th July.

Thanks are expressed to contributors to the PALESTINE EXPLORATION QUARTERLY for the articles listed below, and to the Editor and others for various reviews and notices.

Helena's Pyramids, by Colonel N. P. Clarke; *Old and New Semitic Texts*, by G. R. Driver; *A Phoenician Naval Gazette*, by T. H. Gaster; *The Structural Decay of the Church of the Holy Sepulchre*, by W. and J. H. Harvey; *Notes on the Bedouin Tribes of the Beersheba District*, by S. Hillelson; *Excavations at Tell ed-Duweir*, by C. Inge; *The Lachish Letters: Their Date and Import*, by Rev. Dr. J. W. Jack; *The Forty Years' Wanderings of the Israelites*, by Major C. S. Jarvis; *Archaeological Exploration in the Southern Desert*, by G. E. Kirk; *The Spring En-Rogel*, by R. Macgregor; *Some Ancient Hebrew Seals*, by A. Reifenberg; *The Fortified Zone of the Plain of Esdraelon*, by J. J. Rothschild; *An Appreciation of the late James Leslie Starkey*, by Olga Tufnell.

C. F. ARDEN-CLOSE,
Chairman.

TREASURER'S REPORT FOR 1938

TOTAL receipts for the year were £1,201 14*s*. 9*d*. Subscriptions amounted to £681 11*s*. 1*d*., showing a reduction of £54 4*s*. 11*d*. of 1937 figures which, to the extent of £22 10*s*. 6*d*. is accounted for by increased arrears at the end of the year. The sale of publications produced £95 1*s*. 9*d*., less by £55 4*s*. 7*d*. than 1937 when sales of *The Wilderness of Zin* were fairly active. Other receipts: Rents £403 7*s*. 8*d*. and income tax repayment from covenanted subscriptions (1937) £19 16*s*. 9*d*. are normal. The small item for fire insurance claim is offset against a bill for repairs of this amount.

The expenditure side of the account shows a contribution of £139 10*s*. to the Archaeological Survey of Palestine. £85 6*s*. of the *Seven Pillars of Wisdom* Trust Account was disbursed and the balance of £39 10*s*. which remained has been returned to the Trustees. Printing is slightly reduced. Repairs and maintenance at £84 18*s*. 4*d*. includes the cost of repainting the exterior of 2 Hinde Street and the redecoration of the interior of the Fund's rooms. Museum fixtures and fittings, including the Watson Memorial museum case, cost £163 3*s*. 11*d*. which was provided out of the legacy bequeathed by the late Lady Watson in 1937. Other expenses are about normal.

The substantial reduction of income indicated above cannot be regarded with complacency, although it probably reflects an effect of the present anxious times. The fact remains that the subscription list is not adequate to build up a sufficient sum with which to resume work in Palestine when conditions become more favourable. Moreover, during the present partial cessation of work in the field, we have to meet the considerable cost of publication of the full report on the excavations at Samaria during the years 1930–35, the first volume of which, *Early Ivories from Samaria*, has just appeared.

Subscribers and local secretaries are warmly thanked for their continued support and are enjoined to do all they can to interest others and get new members.

S. F. NEWCOMBE,
Hon. Treasurer.

PALESTINE EXPLORATION FUND

BALANCE SHEET 31st DECEMBER, 1938

Liabilities.	£	s.	d.	£	s.	d.
Capital :—						
Authorised—200 Shares of £1 each	200	0	0			
Issued—10 Shares of £1 each—not called				—		
Sundry Creditors—For Current Expenses				38	17	4
Surplus of Assets over Liabilities :—						
(Excluding Donated Property) as per last Balance Sheet	1,921	5	5			
Add Surplus for the year	2	11	0	1,923	16	5
				£1,962	13	9

Assets.	£	s.	d.	£	s.	d.
Freehold Property—Donated—No. 2 Hinde Street (Estimated value £5,000)				—		
Alterations and Improvements No. 2 Hinde Street				1,188	17	5
Museum, Library and Store-room, Fixtures, Fittings, Furniture, etc. (as per last Balance Sheet) ...	£218	18	8			
Additions during the year ...	163	3	11	382	2	7
Jewish Colonial Trust—Donated—50 Ordinary Shares of £1 each, fully paid				—		
Stock of Publications, Maps, Books, Models, Lantern Slides, Library, Antiques, Furniture, etc.				—		
Sundry Debtors				7	9	6
Subscriptions in Arrear				63	10	6
Cash :—						
At Bank	£298	15	6			
In Hand	21	18	3	320	13	9
				£1,962	13	9

C. F. Arden-Close, *Chairman.*

S. F. Newcombe, *Hon. Treasurer.*

RECEIPTS AND PAYMENTS ACCOUNT FOR THE YEAR ENDED 31st DECEMBER, 1938

RECEIPTS.	£	s.	d.	£	s.	d.
To Balance—31st December, 1937 ...				634	18	1
,, Subscriptions and Donations, including Local Societies				681	11	1
,, Sale of Publications :						
Books	79	0	1			
Casts, Maps and Lantern Slides ...	16	1	8			
				95	1	9
,, Rent of Upper Floors and Basement, No. 2, Hinde Street				403	7	8
,, Fire Insurance Claim				1	17	6
,, Income Tax Repayment from Covenanted Subscriptions				19	16	9
				£1,836	12	10

PAYMENTS.	£	s.	d.	£	s.	d.
By Archaeological Survey of Palestine	139	10	0			
,, "Seven Pillars of Wisdom" Trust (Student payments)	85	6	0			
				224	16	0
,, Refund to "Seven Pillars of Wisdom" Trust				39	10	0
,, Printing, including PALESTINE EXPLORATION QUARTERLY, Annual Report, Postage and despatch ...				363	19	3
,, Editor's fee				50	0	0
,, Blocks "Early Ivories from Samaria"				7	15	10
,, Books purchased : For Library and re-binding	8	19	1			
For Re-sale ...	10	1	4			
				19	0	5
,, Relief Map, Lantern Slides and Photographs				19	0	7
,, Lectures and Meetings				1	10	0
,, Repairs and Maintenance				84	18	4
,, Museum Fittings and Fixtures (including the Watson Memorial Museum case)				163	3	11
,, Salaries and Wages				453	6	6
,, Postages and Telephone				26	16	6
,, Fire Insurance				5	13	5
,, Rates and Taxes				10	10	1
,, Lighting and Heating				16	11	1
,, Advertising				1	12	0
,, Stationery and Sundries				16	14	8
,, Audit Fee				10	10	0
,, Cheque Books and Bank Charges ...					10	6
				£1,515	19	1
,, Cash : At Bank }31st Dec., 1938	298	15	6			
In hand	21	18	3			
				320	13	9
				£1,836	12	10

	£	s.	d.		£	s.	d.
Receipts for year, as shown above	1,201	14	9	Payments for year, as shown above	1,515	19	1
Less : Arrears of last year's subscriptions, etc., received during 1938 ...	45	0	11	*Less :* Creditors at 31st December, 1937, paid during 1938	166	9	8
	£1,156	13	10		1,349	9	5
Add : Arrears, etc., at 31st December 1938, as shown by Balance Sheet ...	71	0	0	*Add :* Creditors at 31st December, 1938, as shown by Balance Sheet	38	17	4
					£1,388	6	9
				Less : Capital Expenditure during 1938 as shown by Balance Sheet	163	3	11
					£1,225	2	10
				To Balance as shown by Balance Sheet	2	11	0
	£1,227	13	10		£1,227	13	10

AUDITORS' REPORT TO THE MEMBERS OF THE PALESTINE EXPLORATION FUND.

We report that we have obtained all the information and explanations we have required as Auditors. We have examined and compared the above Balance Sheet and the Receipts and Payments Account with the books and vouchers of the Fund, and, in our opinion, they are properly drawn up so as to exhibit a true and correct view of the state of the affairs of the Fund, according to the best of our information and the explanations given to us and as shewn by the books of the Fund.

19 COLEMAN STREET,
LONDON, E.C.2.
28th April, 1939.

TURQUAND, YOUNGS, MCAULIFFE & CO.,
Chartered Accountants.

LIST OF SUBSCRIPTIONS AND DONATIONS

RECEIVED BETWEEN JANUARY 1st AND DECEMBER 31st, 1938, INCLUSIVE.

*** If any omission or mistake be observed in the following lists, the Secretary will be very glad to be informed of it, and will rectify the error in the next Annual Report.

	£	s.	d.
Adler, E. N., Esq.	0	10	6
Alford, Miss M.	1	1	0
Arden-Close, Sir Charles ...	2	2	0
Argyll and the Isles, Dean of	1	1	0
Armitage, Robert, Esq. ...	2	2	0
Ashcroft, Miss D. M. ...	1	1	0
Ashmole, Prof. Bernard ...	1	1	0
Auffarth, F. B., Esq. ...	2	2	0
Balston, Miss F. C. ...	1	1	0
Barclay, Major R. L. ...	1	1	0
Barham, S. P., Esq. ...	1	1	0
Barnes, Prof. W. Emery ...	1	1	0
Barnett, Mrs. H. Lake ...	2	2	0
Barnett, R. D., Esq. ...	1	1	0
Barrois, Rev. Prof. A. G. ...	1	1	0
Barron, Mrs.	1	1	0
Barton, Prof. G. A. ...	3	3	0
Bate, Miss D. M.	1	1	0
Batho, Miss D.	1	1	0
Battersby, Mrs. E.	1	1	0
Baxendell, J., Esq. ...	0	12	6
Bayley, Arthur R., Esq. ...	2	2	0
Beasley, Walter, Esq. ...	2	2	0
Becke, Major A. F. ...	1	1	0
Beeman, G. B., Esq. ...	2	2	0
Beeman, W. H., Esq. ...	2	2	0
Belmore, The Earl of ...	1	1	0
Bentzen, Prof. A.	1	1	0
Bethell, Miss M.	1	1	0
Blair, Dr. D. P.	1	1	0
Blomberg, G., Esq. ...	1	1	0
Blyth, Miss Estelle	1	1	0
Bodding, Rev. P. O. ...	1	1	0
Boulton, W. H., Esq. ...	1	1	0
Brackenrig, L. R., Esq. ...	1	1	0
Bradley, Ralph, Esq. ...	2	2	0
Bramwell, W., Esq. ...	1	1	0
Bristow, Ernest, Esq. ...	1	1	0
Brown, James, Esq., Jr. ...	2	2	0
Burdon, Rev. R. J. ...	1	1	0
Bushell, W. F., Esq. ...	1	1	0
Buxton, Dr. P. A.	1	1	0
Caiger, Rev. S. L.	1	1	0
Cairns, Rev. Dr. W. T. ...	0	10	6
Carpenter, Rev. F. W. ...	0	10	6
Carried forward ...	57	17	0

	£	s.	d.
Brought forward ...	57	17	0
Catterson, S. M., Esq. ...	2	2	0
Chalmers-Hunt, D. R., Esq.	1	1	0
Christ Church, the Dean of	1	1	0
Christian, Dr. V.	1	1	0
Clarke, Col. N. P.	1	1	0
Cobb, Sir Cyril	1	1	0
Cole, S. C., Esq.	2	2	0
Colville, E. F., Esq. ...	2	2	0
Commissariat of the Holy Land	2	2	0
Cooke, Rev. Prof. G. A. ...	0	10	6
Coullie, Lt.-Col. A. G. ...	1	1	0
Crace, Mrs.	2	2	0
Crace, J. F., Esq.	1	1	0
Crawford, O. G. S., Esq. ...	1	1	0
Crimp, Dr. G. Lydston ...	3	3	0
Crowfoot, J. W., Esq. ...	1	1	0
Curson, Miss D. L.	1	1	0
Curwen, B. H., Esq. ...	1	8	0
Curwen, Dr. E. Cecil ...	1	1	0
Curwen, Dr. Elliot	2	2	0
Daiches, Dr. S.	1	1	0
Davies, Miss A. M.	1	1	0
Deacon, J. F. W., Esq. ...	2	2	0
Deedes, Mrs. C. N.	1	1	0
Dirk, Pons & Co., Messrs. ...	1	1	0
Dixon, Rev. H. L.	1	1	0
Dowling, Miss F. H. ...	1	1	0
Driver, G. R., Esq. ...	2	2	0
Du Boulay, Brig.-Gen. W. H.	1	1	0
Dugmore, Rev. C. W. ...	1	1	0
Dulau, Mons. P.	1	1	0
Edwards, Rev. A. H. ...	1	1	0
Edwards, Dr. R. C. ...	2	2	0
Edwards, W. C., Esq. ...	1	1	0
Elligor, Prof. Carl	2	9	2
Elmslie, Rev. Prof. W. A.	1	1	0
Elsdon, Miss	1	1	0
Evans, E. M. P., Esq. ...	1	1	0
Eves, G. W., Esq.	1	1	0
Falconer, Harold, Esq. ...	1	1	0
Farmar, Miss	3	0	0
Firminger, Rev. Dr. W. ...	1	1	0
FitzGerald, G. M., Esq. ...	2	2	0
Fleming, Andrew, Esq. ...	1	1	0
Carried forward ...	119	16	8

	£	s.	d.
Brought forward ...	119	16	8
Fothergill, Dr. Claud	1	1	0
Fox, Lady	1	1	0
Frank, Miss	1	1	0
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By

C. LEONARD WOOLLEY & T. E. LAWRENCE

With a chapter on the Greek Inscriptions by
M. N. Tod

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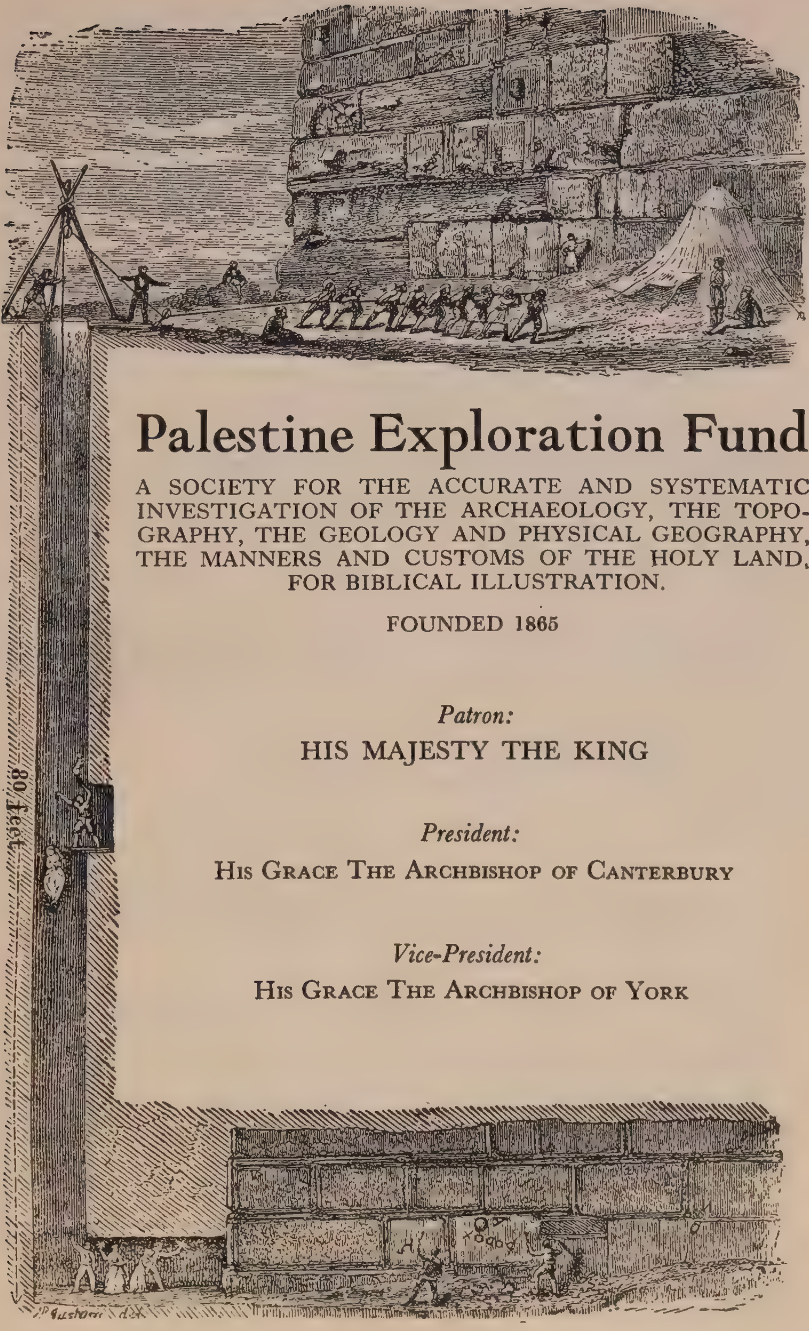

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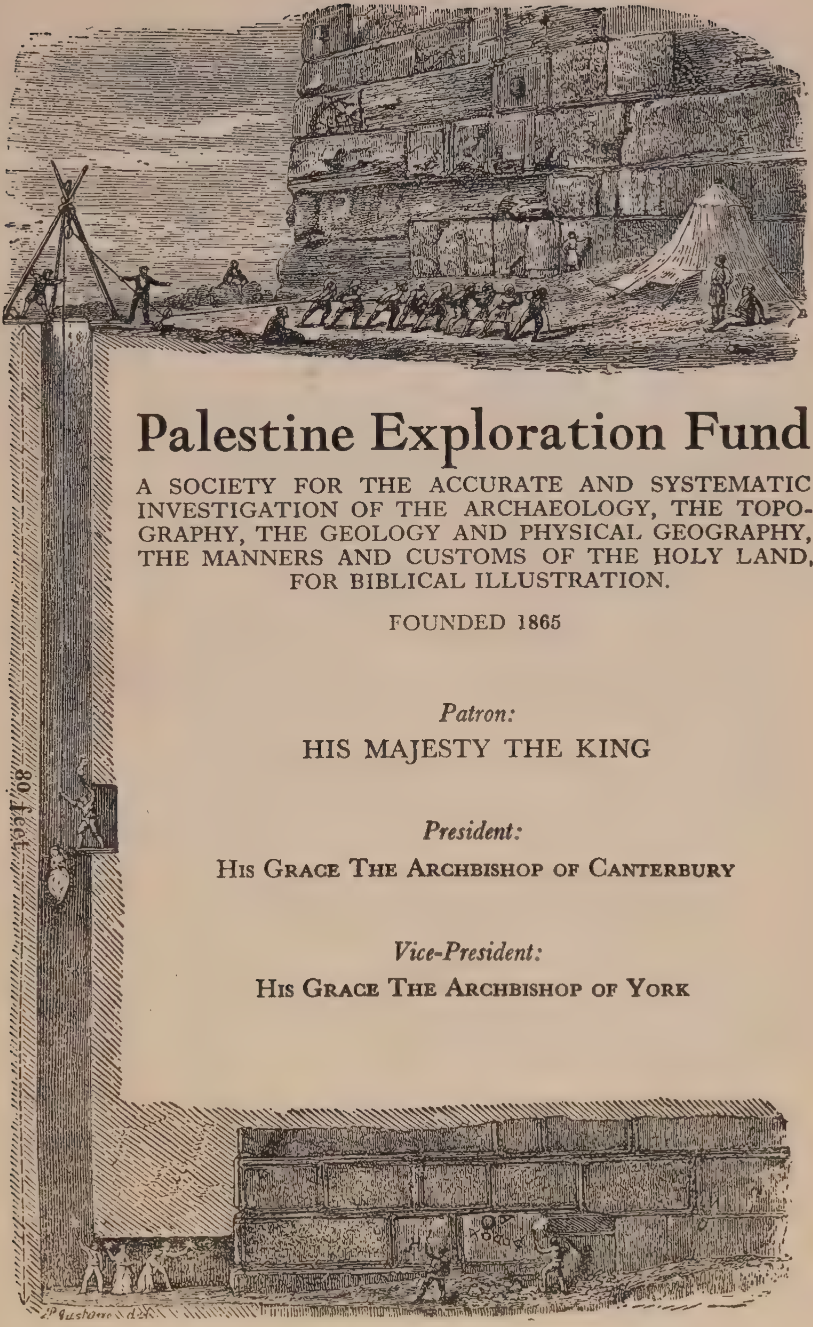

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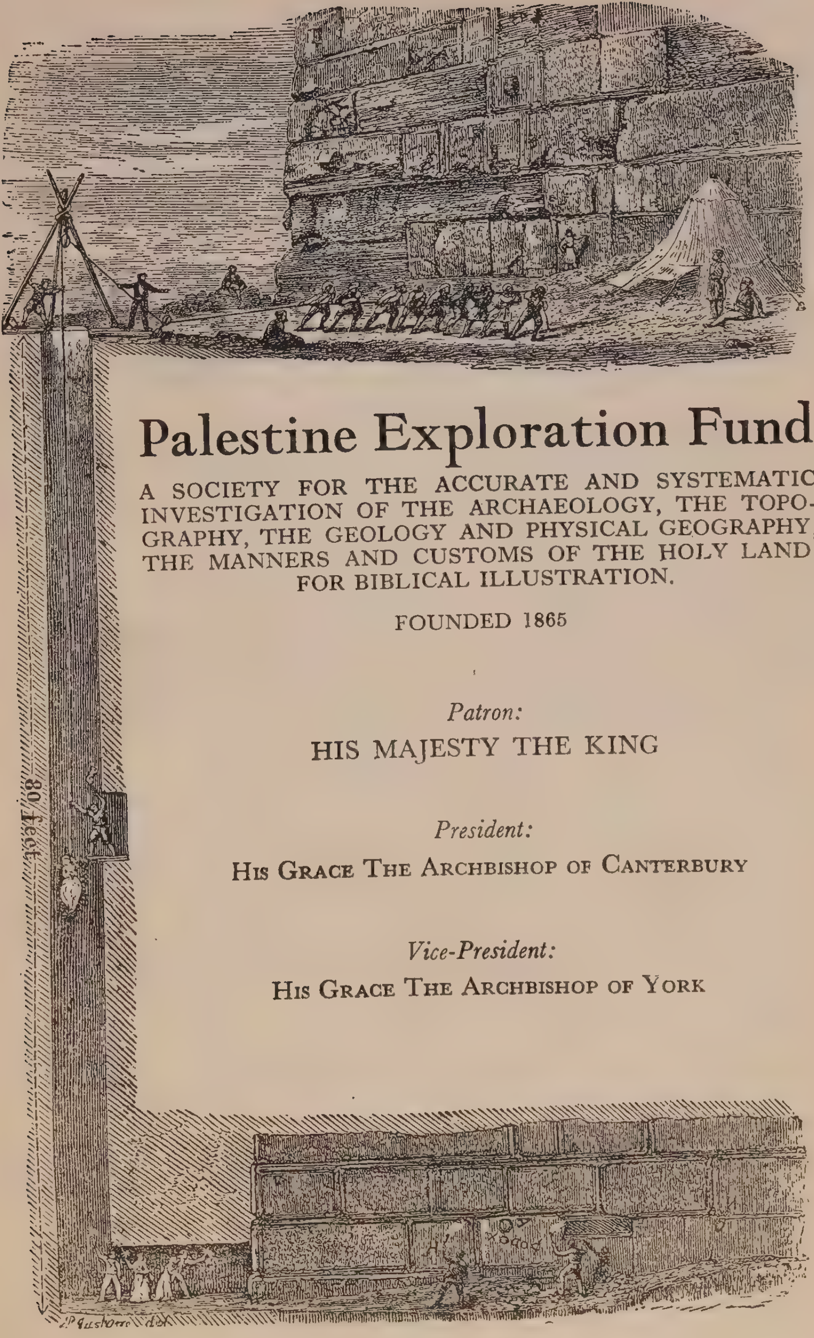

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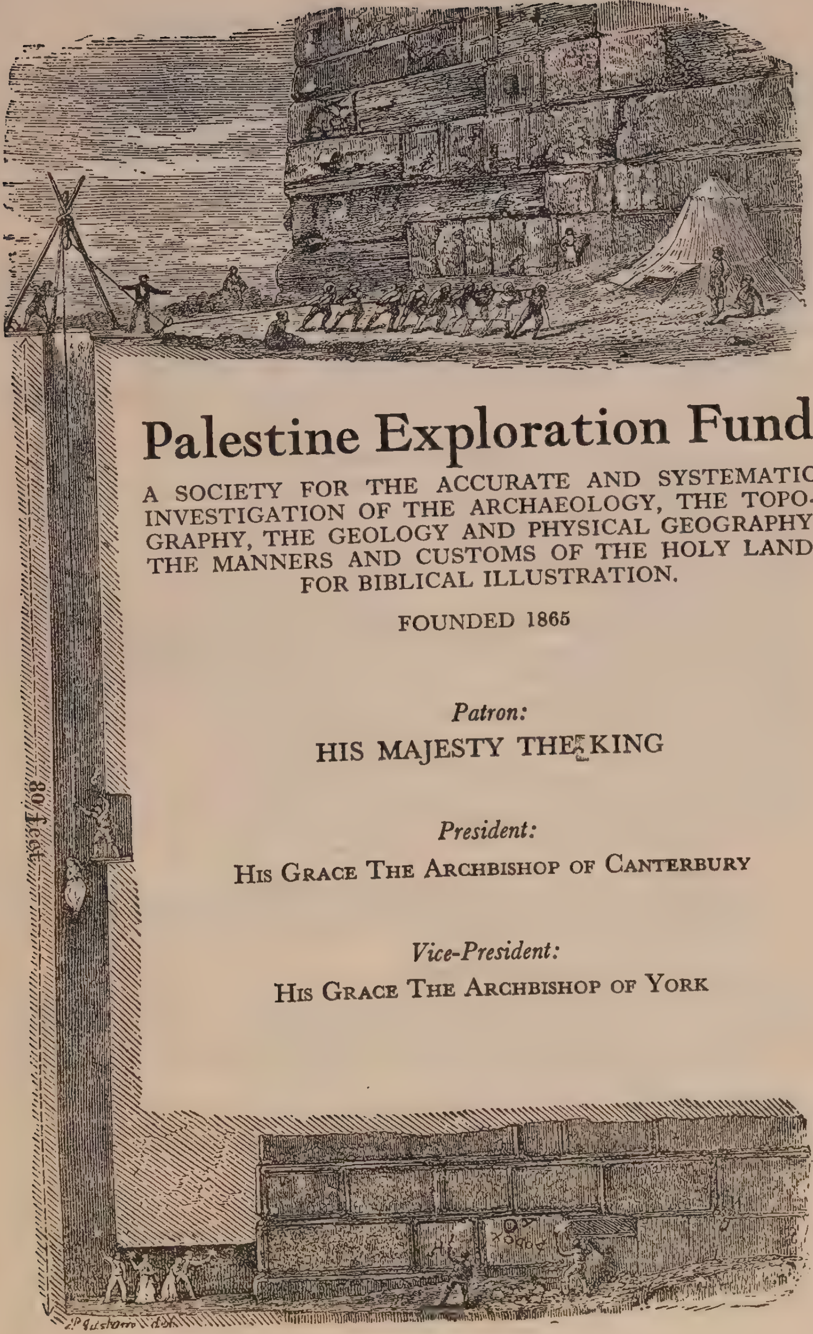

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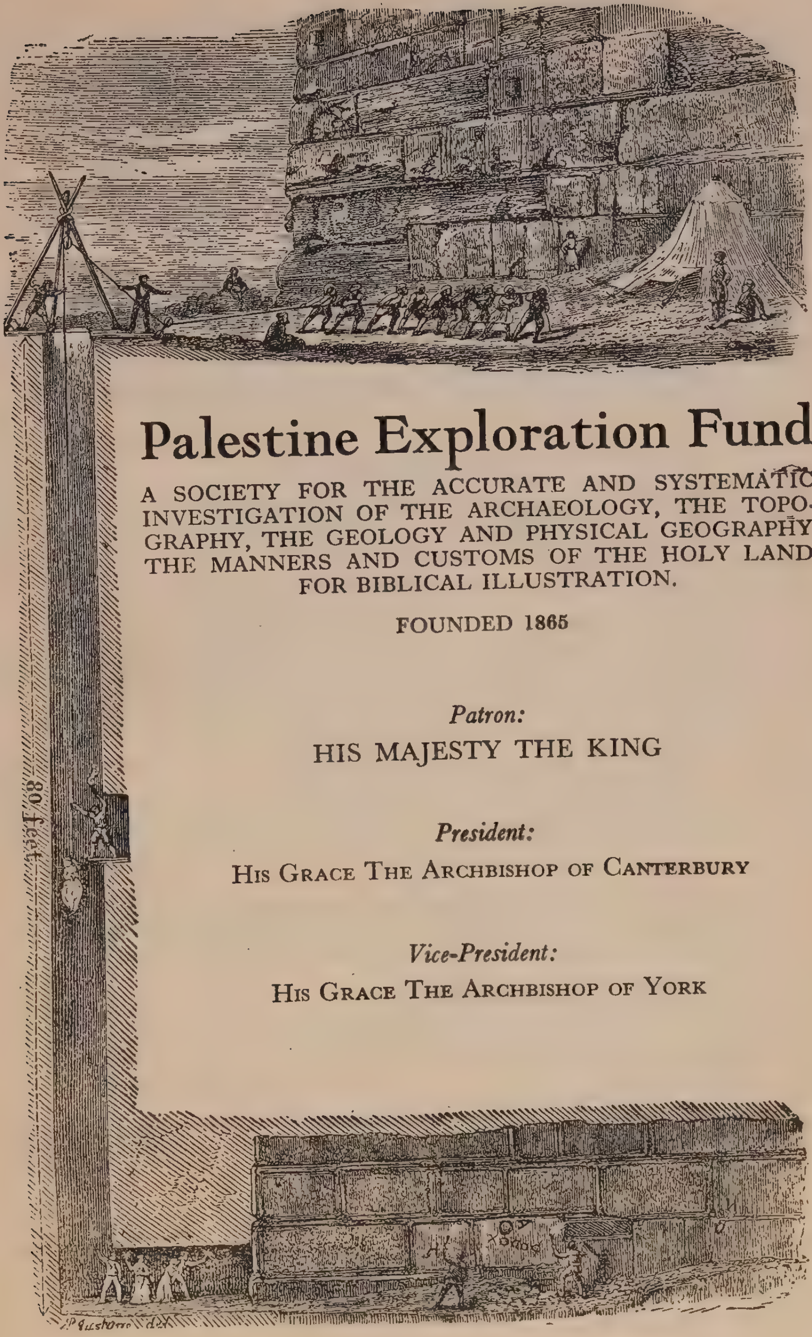

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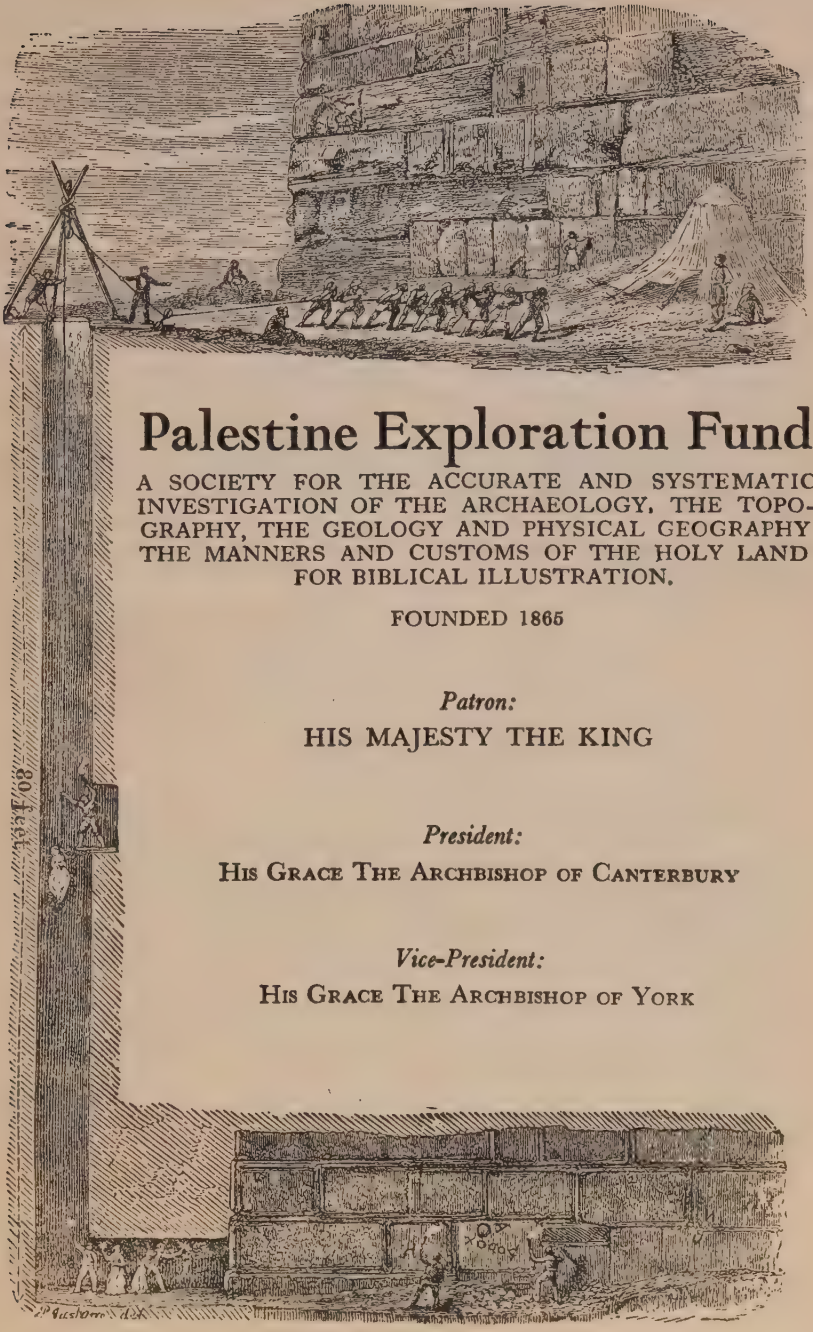

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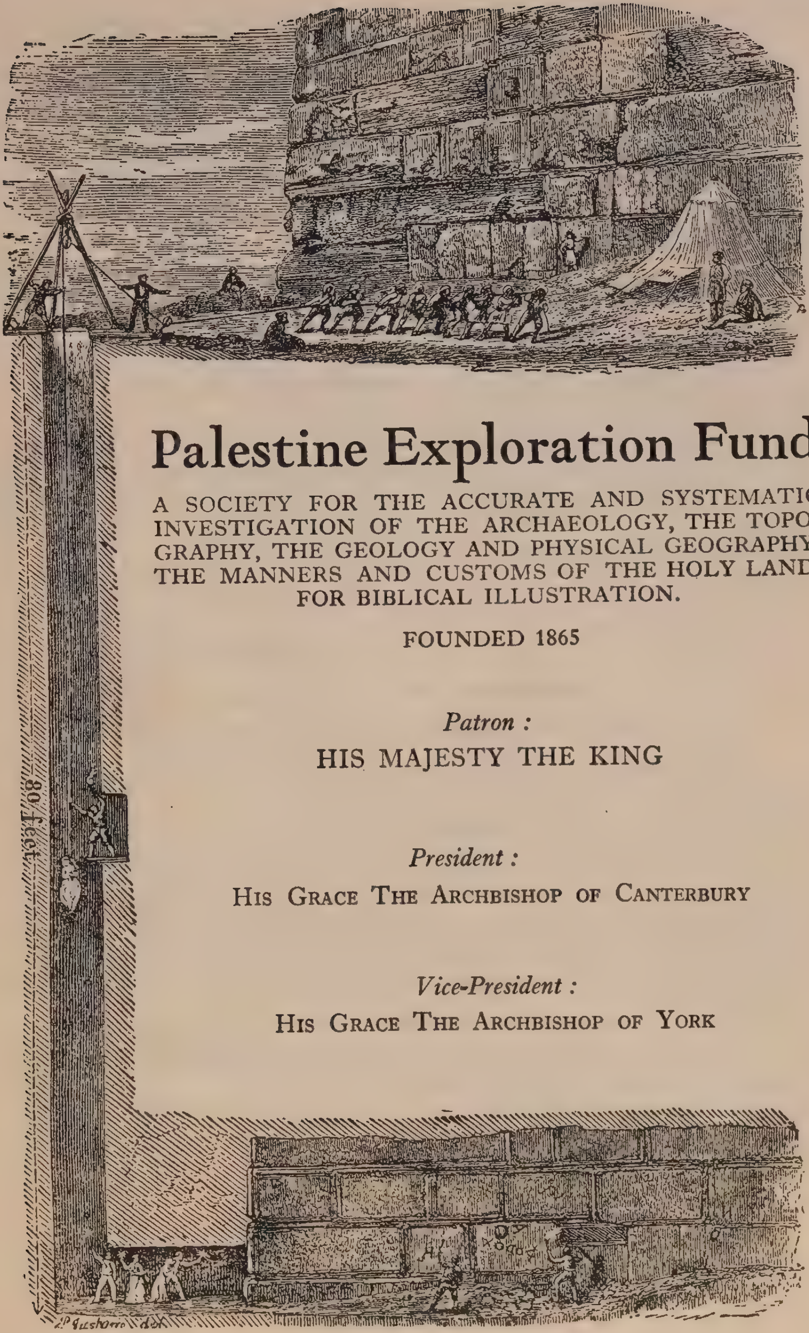

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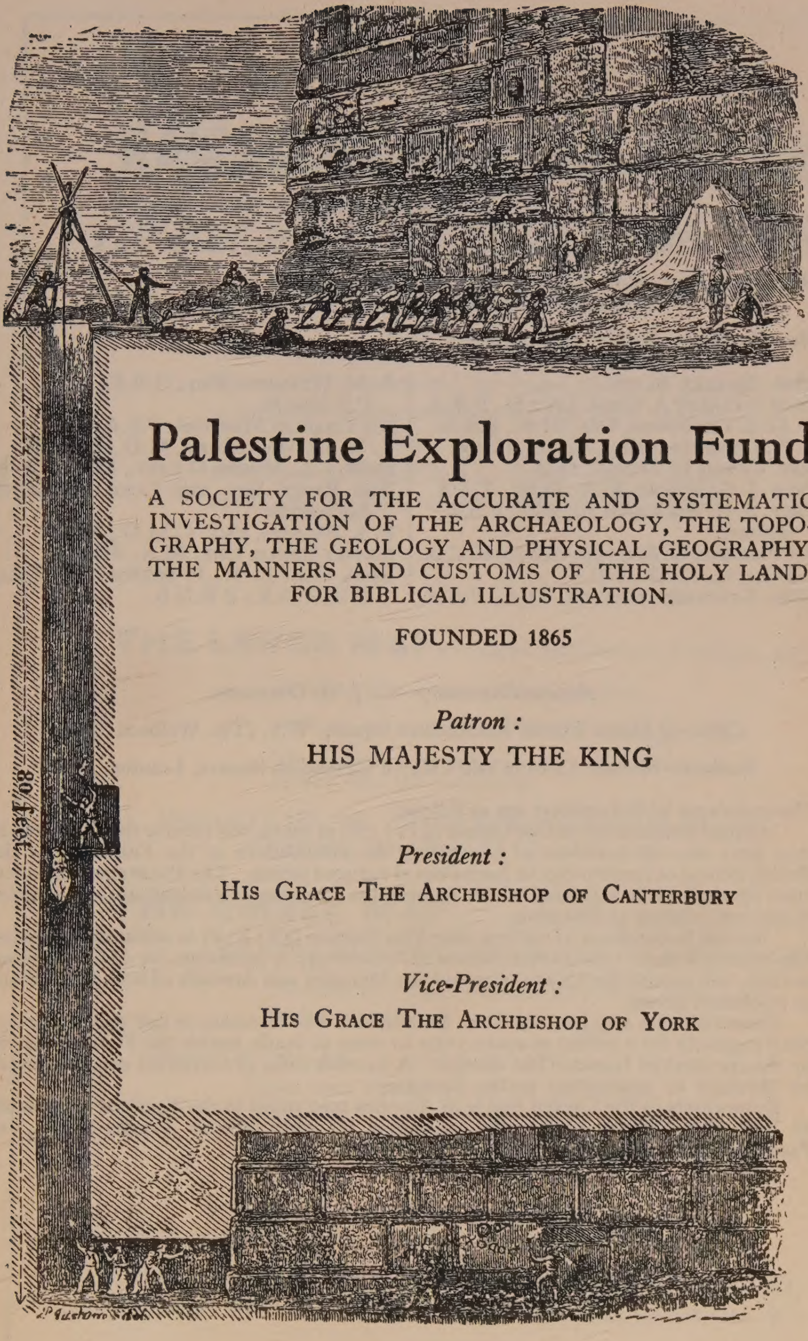

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